

The Mining Journal.

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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No. 2416.—VOL. LI.

LONDON, SATURDAY, DECEMBER 10, 1881.

[WITH SUPPLEMENT.] PRICE SIXPENCE
PER ANNUM, BY POST £1 4s

MR. JAMES H. CROFTS, STOCK AND SHARE BROKER,
AND MINING SHARE DEALER,
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.
ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Bonds, (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.
Business negotiated in Stocks and Shares not having a general market value.

Every Friday a general and reliable List issued (a copy of which will be forwarded on application), containing closing prices of the week.

BANKERS: CITY BANK, LONDON—SOUTH CORNWALL BANK, ST. AUUSTELL.

SPECIAL DEALINGS in the following, or part—
50 Almada, 6s. 3d. 40 Hington Down, £18 9
50 British United, 22s. 100 Herodfoot, 8s. c.p. 100 Parys Copper, 17s.
50 Carnarvon Cop., 18s. 9 40 Indian Kingston, 13s. 9 50 Pestarens, 5s. 9d.
40 Callao Bis, 16s. 50 Javali, 6s. 6d. 25 Ruby, 24.
10 Devon Con., £7½. 50 Killifreth, 35s. 10 Richmond, £16 7s. 6d.
50 Devon Friendship, 18s. 50 Kapanga, 12s. 6d. 20 Roman Gravel, 10s.
50 East Blue Hills, 14s. 6 25 Langford, 12s. 20 So. Devon, £1 11s. 3d.
25 East Caradon, 12s. 50 Last Chance, 14s. 40 S. Indian Gold, £18 9
25 East Chiverton, £22. 25 Leadhills, £1 18s. 9d. 10 S. Condurow, £11½.
20 East Lovell, £23½. 20 Marke Valley, £1 6s. 3 40 So. Darren, £1 9s.
20 E. Roman Gravel, 16s. 80 Morfa Du, 13s. 6d. 25 S. E. Wynad, £1 8 9
20 East Van, 16s. 3d. 30 Mona Consols. 50 Penstruthal, 11s. 3d.
50 Frontino, £23 15s. 30 Nouv. Monde, 12s. 6d. 100 Santa Barbara, 23s. 6d.
25 Glenrock, £1 8s. 9d. 30 No. Penstruthal, 16s. 3 25 Tanker. Gt. Con., 10s.
45 Glenroy, 9s. 9d. 50 New W. Caradon, 12s. 6 30 West Phoenix, £1 7s. 6
50 Gold Coast, 30s. 50 Pandora, 11s. 6d. 50 West Caradon, 15s.
50 Grogwinon, 30s. 25 Polrose, 13s. 9d. 20 Wheel Crebor, 24.
20 Gt. So. Mysore, 12s. 6 70 Port Phillip, 5s. 9d. 10 West Kitty.

* BUYER of United Van Consols and Glyn Shares (Ordinary and Preference).
* SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.

* SPECIAL BUSINESS at CLOSE PRICES in all Market TIN, COPPER, and LEAD SHARES.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.
ESTABLISHED 1842.

INDIAN GOLD MINES.—SPECIAL BUSINESS in:—
Cootacivil. Indian Kingston. Rhodes Reef.
Devala Moyer. Indian Trevelyan. South-East Wynad.
Devala Central. Mysore. South Indian Gold.
Great Southern Mysore. Mysore Reefs. Tambacherry.
Indian Glenrock. Ooregum. Wynad Perseverance.
Indian Phoenix. Organo.
At CLOSE MARKET PRICES, free of commission.

* Reliable information given on any of the above. A daily price list issued giving closing quotations. SPECIAL BUSINESS in Frontino and Bolivia Potosi, Ruby, Nouveau Monde, and Richmond.

* SHARES IN THE ABOVE INDIAN OR OTHER GOLD AND SILVER MINES SOLD FOR FORWARD DELIVERY ONE, TWO, OR THREE MONTHS ON DEPOSIT OF TWENTY PER CENT.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

RAILWAYS.—FOREIGN BONDS.—SPECIAL BUSINESS.
Fortnightly Accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

AMERICAN AND CANADIAN STOCKS AND SHARES.—SPECIAL BUSINESS.
Fortnightly Accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

MR. W. H. BUMPUS, STOCK AND SHARE BROKER,
AND MINING SHARE DEALER
44, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

BUSINESS transacted in STOCK EXCHANGE SECURITIES and MISCELLANEOUS SHARES of every description. RAILWAYS, BANKS, FOREIGN and COLONIAL BONDS, TRAMWAYS, TELEGRAPHS, and all the LEADING INVESTMENTS. Accounts opened for the Fortnightly Settlement. A List of Investments free on application.

Mr. BUMPUS has SPECIAL BUSINESS in the undermentioned:—

100 Almada, 6s.	50 Eberhardt, 16s.	50 Port Phillip, 5s. 9d.
50 Akankoo, 17s.	25 Frontino, £23 13s. 9d.	100 Potosi, 11s.
25 Arendal, £22½.	100 Goodfellow, 22s. 6d.	50 Pen-yr-Osadd, 20s.
50 Bratsberg, £21½.	50 Gold Coast, 30s. 6d.	20 Richmond, £16½.
100 Bedford United, 34s.	30 Hington Down, 27s.	25 Ruby, £3 15s.
100 Callao Bis, 16s.	75 Indian Glenrock, 16s.	10 Roman Gravel, £11½.
20 Carnarvon, 12s. 6d.	40 Killifreth, 35s.	50 Silver Peak, 3s.
25 Colorado, £2 5s.	100 La Plata, 41s.	25 South Devon, 32s.
5 Carn Red, 11s.	60 Last Chance, 14s.	15 So. Condurow, £11½.
50 Don Pedro, 11s. 3d.	20 Mellanear, 10s.	100 Tankerville, 10s. 3d.
2 Dolcoath, 10s.	50 Marke Valley, 28s.	50 West Phoenix, 10s.
40 Derwent, 28s. 6d.	15 New Quebrada, £25½.	50 West Polbrean, 22s.
100 Devon Friendship, 18s.	100 Nouv. Monde, 11s. 6d.	40 W. Godolphin, £23½.
15 Devon Consols, £8.	100 North Herodfoot, 10s.	10 Wh. Grenville, 10s.
50 Devala-Moyer, 26s. 3d.	50 Okel Tor, 10s.	50 Wheel Crebor, £22½.
100 Drake Walls, 7s. 9d.	30 Plumas Eureka, 10s.	100 Wheel Jewell, 11s. 6d.
30 E. Roman Gravel, 16s.	25 13s. 9d.	70 West Caradon.
50 East Blue Hills, 14s. 6	70 Parys Copper, 19s.	

SPECIAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.

Mr. BUMPUS devotes special attention to these Securities, and is in a position to afford reliable information and advice to intending investors and others.

IMPORTANT TO INVESTORS.—Shares in SOUND DIVIDEND and PROGRESSIVE MINES (particularly TIN and COPPER) should be bought at present prices, as many of them are likely to have a considerable rise before long. Those who have followed my advice during the past few months can now realize good profits, and there is every probability that much higher prices will be reached early in the coming year.

The following are particularly recommended:—
WHEAL GRENVILLE. WEST KITT. WEST PEEVOR. WEST GODOLPHIN. WHEAL BOYS. DEVON FRIENDSHIP.

WILLIAM HENRY BUMPUS, SWORN BROKER.
OFFICES: 44, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

MR. GEORGE BUDGE, STOCK AND SHARE DEALER
9, GRACECHURCH STREET, LONDON, E.C. (Established 28 years).
ALL BUSINESS TRANSACTED FREE OF ANY CHARGE FOR COMMISSION.

Notice to Investors and Speculators. Mr. BUDGE has DEALINGS in—
50 Almada, 6s. 3d. 85 Parys Copper.
50 Bedford United. 150 Pestarens.
100 Chontales. 100 Hoover Hill.
100 Callao Bis. 25 Hington Down.
2 Carn Brea. 50 Indian Phoenix.
50 Devon Friendship. 100 Javali.
100 Don Pedro. 25 Kit Hill.
2 Dolcoath. 100 Kapanga.
25 East Chiverton. 20 Lead Hills.
100 East Blue Hill. 30 Langford.
50 East Caradon. 40 New West Caradon.
10 Frongoch. 50 New Kitty.
50 Gawn. 30 Okel Tor.
60 Glenroy. 40 Polrose.
75 Gold Coast. 100 Prince of Wales.
SPECIAL BUSINESS in West Polbrean, Wheal Agar, West Kitty, Penhalls, New Kitty, Parys Copper, Goginan, Dolcoath, Gawn, and East Blue Hills.

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Messrs. PETER WATSON AND CO.,
18, AUSTIN PRIARS,
OLD BROAD STREET, LONDON, E.C.
BANKERS: THE ALLIANCE BANK (Limited).

Messrs. PETER WATSON AND CO.'S
BRITISH AND FOREIGN MONTHLY MINING NEWS
—STOCK AND SHARE INVESTMENT NOTES—MINES,
MINERALS, AND METAL MARKETS—SHARE LIST,
No. 836, Vol. XVI., for NOVEMBER month, is now ready,
and will be sent to customers on application.

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Messrs. PETER WATSON AND CO.,
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MR. ALFRED E. COOKE,
DEALER IN BRITISH AND FOREIGN STOCKS AND SHARES
OF EVERY DESCRIPTION.
76, OLD BROAD STREET, LONDON.
ESTABLISHED 1853.

THE INVESTORS' GAZETTE.
NEW NUMBER issued last evening. Should be read by all INVESTORS.
Will be forwarded on application.

MR. ALFRED E. COOKE can sell the following shares—
15 Arendal. 100 Herodfoot. 70 Prince of Wales.
40 Bratsberg. 100 Indian Glenrock. 85 Parys.
20 Bwch United. 50 Indian Trevelyan. 100 Parys.
30 Bedford United. 50 Killifreth. 20 Ruby.
50 Carnarvon Copper. 50 Kapanga. 25 Richmond.
100 Callao Bis. 40 Langford. 10 Roman Gravel.
80 Devon Friendship. 20 Leadhills. 80 Sortridge.
5 Devon Consols. 20 Morfa Du. 30 Tankerville.
100 East Blue Hills. 25 Mona Consols. 25 Van and Glyn.
25 East Chiverton. 10 Mon. 20 West Caradon.
30 Frontino. 100 Nouvau Monde. 25 Wheel Crebor.
50 Gt. Southern Mysore. 90 New West Caradon. 10 West Kitty.
20 Hington Down. 50 Polrose. 5 West Pevor.

Offers may be made or lowest market price FREE OF COMMISSION will be taken for ALL or ANY PORTION of the above shares.
Settlement either for CASH, FORTNIGHTLY ACCOUNT, MID. JANUARY ACCOUNT, or for FORWARD DELIVERY IN TWO or THREE MONTHS on payment of 20 per cent. deposit.

TELEGRAMS and LETTERS receive immediate attention. All shares currently dealt in, bought and sold, free of commission.

ALFRED E. COOKE, 76, OLD BROAD STREET, LONDON.
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FOREIGN BONDS, TELEGRAPHS, TRAMWAYS, RAILWAYS, AND
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Special Business at close prices in all British, Colonial, and Foreign Mine Shares.
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262, GRESHAM HOUSE, LONDON, E.C.
ESTABLISHED 1877.

THE COMING GOLD FIELDS—THE GOLD COAST COLONY.
Mr. WILLIAM GABBOTT has business in the following:—
EFFENTIA—GOLD COAST. AKANKOO—GUINEA COAST GOLD

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Mr. Reynolds has gained his information upon which great reliance can be placed at considerable expense. Correspondents who are strangers to him, therefore, wishing for his guidance in Mining matters must accompany their applications with a fee of 21s.

Mr. Reynolds does business in all descriptions of mining and other stocks and shares at net prices, and in the event of business resulting from his information he allows the 21s. fee on purchase-money or otherwise.

Mr. Reynolds also refers his readers to his article on page 1528.

MR. E. J. BARTLETT, 30, GREAT ST. HELENS, LONDON,
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F. E. W. and Co. strongly recommend an investment in the following companies at present prices:—
Lady Bertha Unl., 16s. East Chilton Man- British & Foreign Boat
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MR. W. MARLBOROUGH, STOCK AND SHARE DEALER,
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Can sell the following SHARES at prices annexed:—
50 Almada, 6s. 6d. 50 Indian Glen, 30s. 40 Parys Corpora., 18s.
50 Bedford United, 37s. 6d. 15 Indian Phoenix, 18s. 6 10 Richmond, £16 12s. 6d.
25 Birdseye Ck., £1½. 60 I.L.L., 3s. 9d. 50 Rhodes Reef, 18s. 3d.
50 Brazilian Gold, 18s. 6 20 Indian Trevel., 20s. 6d. 25 Ruby, £3 18s. 9d.
25 Bwch United. 75 Kapanga, 13s. 50 Royaton.
50 Consolidated, 5s. 25 Kit Hill, 17s. 15 Roman Gravel, £11½.
50 Colorado, £2 7s. 6d. 50 La Plata, 41s. 6d. 20 South Darren, 28s. 9d.
50 Callao Bis, 16s. 6d. 40 Langford Silver and 25 So. Indian, £1 10s.
100 Chontales, 3s. 6d. Copper, 13s. 9d. 25 Tankerville, 10s. 6d.
40 Dev. Friendship, 17s. 6 60 Last Chance, 16s. 40 Tambacherry, 21s. 3d.
30 Don Pedro Gold, 11s. 3 25 Marke Valley, 26s. 3d. 25 Tin Hill, 17s.
25 East Blue Hills, 14s. 75 Nouveau Monde, 12s. 6 40 Wheel Jewell, 8s. 6d.
20 Emma, £22½. 50 N. Trumpet Con. (call paid.)
100 Exchequer 3s. 6d. 40 N. W. Caradon, 10s. 6d. 60 West Crebor, 7s. 3d.
20 Gunnislake (Clitters), 35 New Kitty, £2. 60 West Lisburne, 17s. 6d.
£3 17s. 6d. 30 North Herodfoot, 6s. 3 50 Wheel Jane, 29s.
40 Herodfoot, 10s. c. p. 50 Pioneer, 17s. 6d. 50 Yorke Peninsula ord.,
50 Hoover Hill, 16s. 3d. 75 Port Phillip, 5s. 3d. 5s. 6d.

Recommended for immediate purchase—Parys, Prince of Wales, New Trumpet, Corporation of South Australian Copper Mines, and Columbian Hydraulic. December Circular now ready.

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MINING AGENT, AND STOCK AND SHARE DEALER,
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MINING INVESTMENTS.—Third Edition, just published.
"What to Select, and What to Avoid," by ALFRED THOMAS, 10, Coleman-street, London, E.C. Will be forwarded on receipt of 12 stamps.

ESTABLISHED 1852.

HENRY GOULD SHARP, STOCK AND SHARE BROKER,
21, THREADNEEDLE STREET, LONDON, E.C.
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Fortnightly Accounts opened in all Stock Exchange Securities on receipt of the usual cover.

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AND MINING ACCOUNTANT,
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ESTABLISHED 1861.

Bankers: London and Westminster, Lothbury, E.C.

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ORDERS BY TELEGRAM PROMPTLY EXECUTED.

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ESTABLISHED TWENTY YEARS.

BANKERS: LONDON AND WESTMINSTER (Lothbury).

Shares specially recommended for immediate investment, viz.—West Caradon, New West Caradon, Polrose, Parys, Sortridge, Wheel Crebor, West Crebor, East Blue Hills, and Langford. These shares are likely to advance in price many hundreds per cent. within a very short period.

GRANVILLE SHARP, STOCK AND SHARE DEALER,
32, QUEEN VICTORIA STREET, LONDON, E.C.

Still recommends the purchase of shares in SOUND BRITISH MINES for advance in price and increased dividends. In consequence of the generally improving condition of Trade and Commerce, the market for all metals must necessarily continue to improve, and the shares in all Sound British Mines are certain to advance proportionately.

EAST CHIVERTON SILVER-LEAD MINES.

GRANVILLE SHARP specially recommends the purchase of shares, the mine being on the eve of proving a very valuable property, as evidenced by the recent important discovery in the 90 ft. level driving west, where a course of rich silver-lead ore already proved for over 30 fms., and has opened up valuable reserves which are being increased daily between that (90 fms.) level and the level over. A second 50-ton parcel of the ore was sold recently realising £631 5s. It is an important fact that EAST CHIVERTON MINE is on the same lode which in the mine immediately west produced between the years 1863 and 1872 silver-lead ore that realised very nearly HALF A MILLION STERLING, and between 1875 and 1880 LEAD and BLENDE ORES amounting to £210,000. These facts can be verified by the books in Mr. Granville Sharp's possession, at 32, Queen Victoria-street, E.C.

Bankers: London and Westminster, E.C.

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200 Silver Peak, 200 West Phoenix, 15s. 3d. 50 South Devon United, £1½.
25 South Crebor, 21s. 6d. 500 Herodfoot, 4s. 9d. £1½.
500 SHAREHOLDERS.—FOR SPECIAL SALE, AT NET PRICES—
500 Herodfoot, 4s. 9d., or 30 Mona, £8. 105 Wheel Jane, 16s.
offer wanted. 70 Riverdon Brewery.

FOR SPECIAL SALE. OFFERS CAN BE MADE:—
30 Wical Sisters. 400 Gt. Southern Mysore. 100 Frongoch.
10 Roman Gravel. 50 Tramways Trust. 50 West Caradon.
200 Silver Peak. 30 Mona.

BUYERS of South-East Wynad, Ooregum, Tamar, South Crebor, Carn Camborne, and Carnarvonshire Great Consols. Sellers please state very lowest price.

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The following SHARES ARE FOR SALE at prices affixed:—
140 E. Wh. Rose, £1 pd. 100 Frongoch (offer). 1 Roman Gravel, £11½.
15s. 50 Devon Great United 100 La Plata, £2 2s. 6d.
100 E. W. Rose, 15s. paid. (£1 5s. paid.) £1 110 Pen-yr-Osadd, 17s.
13s. 3d. 100 Mysore Reef, 8s. 9d. 20 Sortridge Consol. (£1.
120 Devon Friendship, 17s. 40 Devon Great Consols. paid), 16s. 3d.
(£1 paid). 40 South Devon United, 20 Van, £2½.
£1 13s. 6d.

FOR SPECIAL SALE AT NET PRICES:—
100 BODIDRIS (£1 paid), 6s. 6d.
95 GREAT POLGOOTH UNITED, 10s. fully paid up.
70 TAMAR SILVER-LEAD, 18s. 9d. fully paid up.

FOR SPECIAL SALE. OFFERS CAN BE MADE.
200 J. B. Lamb and Co. 400 Great Southern Mysore. 100 Killifreth.
100 Carn Camborne. 200 Old Shepherds. 250 Old Shepherds.
100 Gold Mining Associa- 20 North London Subur- 20 South London Trams.
tion of Canada. ban Trams. 300 Central Wynad.
235 Indian Queens. 125 Parka Mines. 50 Wynad District.
50 Lady Ashburton. 100 East Blue Hills. 110 Treacavan.
50 Pioneer. 90 Parys. 240 Gold Mining Trust.
340 Mounts Bay. 80 Prince of Wales. 70 West Caradon.

MR. JOHN L. M. FRASER,
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A Select List of Mines that will advance from 300 to 500 per cent. on present prices.

6039 Shares, the balance of the Share Capital, are now offered for Subscription at Par. Applications must be sent in not later than the 15th instant.

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DEBENTURE CAPITAL (bearing interest at the rate of 5 per cent. per annum) £15,500.

SHARE CAPITAL £50,000, IN 10,000 SHARES OF £5 EACH.

£1 per Share payable on application, and £3 per Share on allotment. Balance, if required by calls not exceeding 10s. per Share, at an interval of not less than three months.

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The Company has acquired the Prince of Wales and Gorsedda Slate Quarries in the County of Carnarvon.

Work is in active progress at the Prince of Wales Quarry, and there is every promise of very favourable results.

Prospectuses and Forms of Applications for the Shares, which must be sent in not later than the 15th inst., may be obtained at the London Offices of the Company.

REPORT FROM CORNWALL

Dec. 8.—We are now so near the Christmas holidays, when business is liable to so many kinds of disturbing influences, that we are not at all likely to see any material change in mining prospects until the New Year. A week ago official improvement was doubtful, but possible; now quiescence may be predicted with almost equal certainty. There is, however, nothing in the shape of reaction, nor is there likely to be. On the contrary, week by week the conditions of a well defined and steady improvement are becoming more certain and settled, and this week's prices both for tin and copper are practically at their maximum.

The Annual Exhibition of the Mining Institute is being held this week at Camborne, and with a more than average amount of success. The society, as we said last week, is very fortunate in its executive. It is fortunate also in being able to a certain extent to open up new ground from year to year, and thus to keep alive an interest more readily than if its operations were restricted to narrower limits. It is very fortunate, too, in the fact that year by year the presidential chair is filled by thoroughly practical men, who are able to give its action a constant tendency in a useful direction, and by their varying ideas and experiences to promote the interchange of new principles and methods of operation. Conservatism in practice, and isolation in spirit, have been the two chief hindrances in the past to the advance of the practice of mining in the West. No organisation has had a more direct and useful tendency to grapple with these evils than the Mining Institute. There are, of course, in its procedure openings for criticism and suggested improvement, but we are very much inclined to doubt, on the whole, whether if it were more theoretically perfect it would be so practically useful.

United Shepherds Wheel Rose is saved from extinction by the judgment of Mr. Justice Chitty against the petition to wind-up. There is nothing in the case that calls for comment but one curious fact. The plaintiff said he had been misled by an advertisement, and the directors alleged and proved that the advertisement was not issued by them. The point arises whether the author of such an advertisement is in any way responsible. It is a legal maxim that for every wrong there is a remedy, but if there is no individual responsibility in such a case as this it is difficult to see where the remedy lies. As it stands the case affords another proof of the ignorance of mining affairs so commonly current among would-be speculators, and the reckless character of their proceedings. If a man will not take ordinary business precautions to look after his money no one else can do it for him. It is well in this instance for Shepherds Wheel Rose that the judgment is so emphatically on all points in its favour. The mine might have been seriously damaged if not crushed by the action taken.

We are glad to see that the adoption of the principle of assurance against the possible consequences of the Employers' Liability Act has found so large a meed of favour among the miners of Cornwall, and that the working of this plan is on the increase. Nothing can be more unwise than to attempt to contract out of or evade an enactment that ere long will be made compulsory.

The movement for the establishment of the Redruth Science and Art School is making steady progress, and already its success is assured. The committee, through their secretaries, Dr. Hudson and Mr. George Chelwell, have issued circulars showing the resolutions which were passed at a public meeting held in November last with reference to the proposed scheme. Plans of the proposed new buildings have been submitted to them by their architect (Mr. James Hicks) and approved, and a canvassing committee has been appointed to solicit subscriptions, Mr. Penrose being appointed treasurer. A freehold site on the Clinton-road, nearly opposite the site of the new church, has been given by Lord Clinton for a nominal consideration (50%). The proposed school will be open to all comers, but it is not expected by the committee that the pupils residing more than three miles distant will make use of it; however, within this area there is a population of 25,000 persons, of whom more than 3000 attend Board Schools. It will, therefore, supply the requirements of Redruth, nearly the whole of Illogan, and parts of Gwennap, Wendron, Kea, and St. Agnes. The art portion of the building will comprise a large elementary room 45 by 30 ft., a master's painting and modelling rooms. The science portions a metallurgical furnace and workshops in the basement, a balance-room, laboratory, and classroom on the first floor, with accommodation for 20 students. The estimated cost of the building alone is 1200%. Apparatus, fittings, and art examples will probably cost between 300% and 400% more. The committee can form no accurate idea of the help which they are likely to receive from the Science and Art Department, but it is probable that the grant will cover the cost of apparatus, so that they want about 1200%, of which about half has been promised.

REPORT FROM NORTH WALES, SALOP, AND CARDIGAN.

Dec. 8.—When some time ago we were inundated with circulars urging us to become the happy purchasers of an interest in the Great Discovery at the Cambrian Mines for the modest payment of 14s. or so to the fortunate owners for every 20s. we subscribed, the circulars were strongly charged with copper. Latterly the circulars have been as strongly charged with "brass." Indeed the mine itself seems to have chiefly yielded brass. It is a felicitous illustration of the transmutation of metals—first lead, secondly copper, thirdly brass, which I commend to the consideration of scientific men, while to Scripture readers I suggest the idea that possibly the ancient words, "out of whose hills thou mayest dig brass," may have had at least a secondary reference to the hills of Cardigan. An important discovery of ore is reported from the Van Consols and Glyn Mine, which has caused a flutter of excitement in the towns of Newtown and Llanidloes. I sincerely hope the discovery is one of permanent value. The week has been an unfortunate one for accidents, which have been happening abundantly all around, and in one or two cases, I am sorry to say, with fatal results. A rumour is afloat that owing to concessions in freight from the Great Western Railway several important railway schemes in connection with Wrexham and the River Dee have fallen through. There are several reasons besides that of freight why we should wish this rumour not to be true. The col-

liers are going to hold a mass meeting on Wrexham racecourse in order to give vent to their disappointment in having to wait for an advance of five per cent. in their wages. Many of the vessels engaged in the slate trade have put back into the ports disabled by the late storms. The slate shipping trade of Portmadoc is good, better than that of the other slate ports, Carnarvon, Dinorwic, and Bangor. The whole of the mineral trades of this district may be described as in a healthy state.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Dec. 8.—Cannock Chase coalmasters state that during the past fortnight the output has fallen off some 30 per cent. Their explanation was that during October and November middlemen bought forward extensively, with the result that the pits were in some localities very busy during that period. The prevalence of unseasonable weather had, however, prevented merchants from finding customers, and their stocks being now very large the demand at the pits had greatly fallen away. Cannock Chase prices for house coal were this afternoon in Birmingham given as—Best deep sorts, 9s. 6d.; best shallow sorts, 8s. at the pits. Staffordshire coal was priced at 8s. 6d. to 10s. at the pits, and forge sorts, 6s. 6d. to 8s. Ironstone of Northampton brand was plentiful at 6s. per ton delivered, and superior sorts from the same district were 6s. 4d. and 6s. 6d. Vendors reported slightly more movement in the market. Pig-iron was in rather better demand; but the contracts booked were not large, for sellers were not prepared to accept for forward orders. Native all-mine pigs varied from 65s. to 70s. for hot-blast sorts. Cold-blast were 85s. to 90s. Thorncliffe (South Yorkshire) pigs were 3%. Hematites were firmer than last week, but the quotations of 72s. 6d. to 75s. make business on local exchanges almost out of the question.

On Wednesday the South Staffordshire Mines Drainage Commissioners had a special sitting at Wolverhampton to consider the propriety of applying to Parliament for an Act to increase the rating power of the board, so that the maximum rate upon coal and slack might be raised from 6d. to 9d. per ton. These powers were declared to be necessary in order to enable the Commissioners to borrow a further 25,000%, to complete the work of the Commission. Mr. Walter Williams, the Chairman, explained that the Commissioners must either stop all the engines and lose all the money they had spent, or go a little further and raise the rate to put the Tipton district in a satisfactory state. He thought that the increased rate would only be required for a short time, as the water in the Tipton mines was lower now than for 30 years. Many of the chief collieries in the district—notably the Earl of Dudley's and the Patent Shaft and Axletree Company's—opposed the scheme on the ground that it would seriously restrict production. Ultimately it was resolved, by 16 votes to 7, that a Bill should be promoted which would effect the increase on coal and slack; fire-clay and limestone to remain unaltered at 3d. per ton.

The South Staffordshire Institute of Mining Engineers have been invited by the trustees of the Mason's College, Birmingham, to appoint a deputation who shall meet a Council of the College on the 14th inst. to discuss the question of a home in the College for the Institute.

TRADE OF THE TYNE AND WEAR.

Dec. 7.—The steam coal trade has scarcely been so well employed this week, mainly through the want of large ships to load this coal on the north side of the Tyne. The shipment of gas and other coal at Tyne Dock has been fully an average. Large contracts have been made for gas coal at somewhat improved rates. A good deal of business is transacted in second class manufacturing coal, but it is nearly all for immediate delivery. The coalmasters ask higher rates for this coal before they enter in business for next year, but consumers are not willing to give an advance. The coke trade is stronger, as a better demand is expected looking at the probabilities of the iron trade next year. On the whole, the prospects for all branches of the coal trade are good, and it is expected that higher prices will be realised; this has indeed been already effected so far to a considerable extent with the contracts made for gas coal and coke. At the moment the steam coal trade is rather quiet, but prices are maintained, and coalmasters expect an improvement in this business next year. The house coal trade is rather quiet at present, the London and other markets having been well supplied, but no reduction of prices is likely to occur at present.

THE WHITBURN, OR MARSDEN, NEW COAL WINNING.—The sinking of the two shafts at this important winning has now been completed below the water bearing strata, both shafts having been completed to this point by the Chaudron system of boring or sinking, and the shafts have been lined by strong cast-iron tubbing, and all the feeders of water, of course, dammed back. The first shaft has been continued through the shales by the ordinary system of sinking, and some seams of coal have already been met with, and one of these seams is now worked for the engine and local consumption. It is expected that the main seam will be reached at no very distant date, and should the seam be found of good section and quality, which is confidently anticipated, this important work will be rapidly developed.

There is no improvement in the chemical trade of consequence. The make on the Tyne will be reduced to some extent by the closing of part of the great works of Mr. Allhusen, known as the Tyne Chemical Works. The attempt to bring about an arrangement with the chemical manufacturers in this district and the manufacturers in Lancashire for a great reduction in the make is likely to prove a failure. This is to be regretted, as there does not appear to be any prospect of the revival of this trade unless the make is greatly reduced.

As we have often noticed in this letter, the electric light is being introduced into many of the engine works and factories on these rivers, and with marked success; and an attempt is now to be made to light the public streets and public buildings in Newcastle with it. It is proposed to utilise the engine power already erected on the

Newcastle quay side, and partially employed for other purposes, to work the necessary machinery for the electric light also.

The pig-iron trade has shown a much better feeling this week, and altogether the tone of the market has improved considerably. Prices are higher by fully 6d. per ton, and a large demand has appeared both from merchants and consumers. A considerable quantity of iron has changed hands within the past few days. The return of shipments for the month of November of pig-iron show that there was an increase of 2463 tons on the previous month, and this increased the firmness of the market considerably. There was also a considerable increase in the shipments of manufactured iron and steel. The manufactured iron and steel trade continues to improve, and prices are very firm, and a rising tendency. The quotations for pig-iron are now 42s. 3d. for No. 3; bar iron, 6l. 2s. 6d.; ship-plates, 6l. 10s., &c. Messrs. Connal's stock stands at 174,833 tons, a reduction on the week of 1000 tons. A company has been formed at South Stockton for the manufacture of brass castings and for producing copper work.

The present output of ship and boiler plates in the county of Durham is higher than it has ever been before, and it is expected that in a few weeks the make will be largely increased. Two additional plate mills will in a short time be started at West Hartlepool after being idle a few years. At the present time the output of plates in the North of England is not less than 1500 tons daily, the highest output that has been attained. This is chiefly contributed to by the Consett, Stockton, Newport, Hartlepool, Sunderland and Bishop Auckland and Darlington mills, and though the bulk of the production is used at the shipyards on the north-east coast, from Blyth to Whitby, there is a large quantity sent to other centres of consumption. There is a good prospect for this business at present. The shipbuilding yard of Mr. Oswald, at Sunderland, is about to be re-started, a company having been formed for the purpose. It is also stated that another shipbuilding company is shortly to be started on the Wear.

At Middlesbrough on Tuesday the iron market showed a degree of animation to which it has long been a stranger. Prices have been much higher, the lowest rate for delivery during the remainder of the year, which was heard of being 43s. No. 3; for the first three months of next year 43s. 6d. Stocks declined last month to the extent of 33,000 tons. The demand from all quarters at home and abroad is good. All branches of the iron trade, both heavy and light, are consuming increased quantities of iron. There is a gradual aggregation of orders in every department. The reports from the shipyards are very satisfactory; work is very brisk. The steel trade is actively employed, and prices of steel rails are improving. The prices paid for foundry iron are rather low. The platemarkets have not formally advanced prices, but are asking 2s. 6d. advance on the week. Ship plates are 6l. 17s. 6d.; bars and angles, 6l. 6s.; boiler plates, 7l. 17s. 6d. Coal and coke firm.

TRADE IN SOUTH WALES.

Dec. 8.—The more moderate weather of the last few days has enabled many ships to get away, while others have arrived to supply their places, and the tonnage is in better supply than heretofore. Notwithstanding the shipping of 106,600 tons of steam coal last week at Cardiff, there is a large amount of arrears to pull up, and the same state of things exists at Newport, where 21,278 tons were exported. Swansea seems about to yield all her coal trade to Cardiff and Newport owing to her distance from the steam coal valleys of Rhondda and Aberdare. The amount exported last week (8199 tons) is a poor show for the "Metropolis of Wales." Matters, however, will mend when the contemplated railways are carried out, as they no doubt will be sooner or later, as the time gained on the departure of the coal trams from the pits to their arrival at the place of shipment will be considerably shortened. The Rhondda Valley, Caerphilly, and Newport Railway, now in course of construction, will place Newport in an excellent position with respect to the Rhondda Valley. Sir George Elliot is a large proprietor in this line, and as he is the chief proprietor in the Alexandra Dock Company and has offered to buy half the shares in the Newport Dock Company, it is evident that he intends to make Newport a great place for the shipping of steam coal. He is the chief owner in the Powell's Duffryn Company, for which 380,000% were paid some years ago, and the result of his venture has evidently not discouraged him. The make of iron and steel is going on rapidly in the district. There are numerous alterations going on in many of the works, showing that the prospect is encouraging. Cyfarthfa, however, still hesitates, but it is reported for the twentieth time that the alterations contemplated will be carried out. The tin-plate trade is looking up, and prices are advancing. The Ynismedw Works, at Pontardawe, recommenced operations on Monday last, and two mills will be in full swing in a few days. The works will be connected with the Midland Railway by a branch across the River Tawe. The Ystalyfera Works are now in full activity. The evil in connection with this trade is that there are a number of small works which cannot afford to act in harmony with the large employers, and the result is that inferior plates with the brands of good makers are sent into the American market, which tends to lower the reputation of Welsh plates among the merchants there.

THE OAKBANK OIL COMPANY.—In the First Division of the Court of Session on Friday a decision was given in a question which has arisen between the shareholders of the Oakbank Oil Company as to whether the dividends declared by the directors should be paid to the shareholders according to the amount of their paid-up shares or according to the amount of their shareholdings, independently of how much may be paid up. Their lordships held that according to the Articles of Association the directors were bound to pay dividends according to the amount of shares held, without reference to the amount paid up thereon.

THE ROYAL POLYTECHNIC INSTITUTION.—This building, which has recently closed its doors to the public, together with premises attached, was put up for sale on Wednesday, at the Mart, Tokenhouse Yard, by Messrs. Rushworth, Abbott, and Stevens. A sale was

not effected, and after some slow bidding which opened at 6000*l*. and closed at 10,000*l*. the property was bought in at the reserve price of 15,000*l*. A hope is entertained, however, that should the premises not be disposed of by private contract within the next few days, the Polytechnic will be re-opened under new management, probably under the immediate direction of the present acting secretary.

OLD SHEPHERDS MINES (LIMITED).

CUTTING OF THE MAIN LODE.

This lode has already paid DIVIDENDS amounting to £80,000 sterling from very limited workings. There is a run on the lode for nearly a mile, which will doubtless be equally rich, and return SEVERAL MILLION POUNDS WORTH of SILVER-LEAD.

There are six other well-known rich lodes in the sett, one of which has paid £161,276 IN DIVIDENDS.

Messrs. Johnson, Matthey, and Co., Assayers to the Bank of England and Her Majesty's Mint, certify the produce of silver to be 186 OUNCES PER TON OF 20 CWTs. OF ORE, and Edward Lampshire, who worked on the lode, states—

"Within a few fathoms from the boundary I saw a LANE OF LEAD—in fact, nothing could be richer—worth 10 TONS OF ORE TO THE FATHOM. From my 45 years' experience in lead mines I am fully persuaded there is not another such valuable sett in Cornwall."

Taking the quantity of ore at 10 tons per fathom, and the silver 186 ounces to the ton, the lode is worth £370 per fathom—making it the richest known lode in England.

ABBOTT, PAGE, AND CO.,

STOCKBROKERS,

42, POULTRY, LONDON, E.C.,

Strongly recommend the purchase of these Shares for early and large advances in prices.

Full reports on this and other progressive investments sent post free on application.

BRITISH ENTERPRISE IN LEADVILLE—OLATHE SILVER MINING COMPANY.—A long and exhaustive report upon the property, by Mr. John Carter, has just been forwarded to the shareholders. Mr. Carter has, it seems, discovered some gentleman in Leadville who is willing to accept the paternity of the letter of "S. B.," published in the Journal of July 30; and, as he has made an unsuccessful search in America for Millom, pronounces it to be an unknown place. He is, however, perfectly satisfied with the result of his journey to Leadville, which he has been able to find, and reports that the Olathe placer claim lies on the west and north-west of Fryer Hill, the east and south-east portions of which, commencing at the Robert E. Lee Mine, is covered with shaft houses, machine shops, and buildings of a miscellaneous description, extending thickly over towards the north and west extremities of the Amie carboniferous and the chrysolite claims, the underground workings of which, he has been informed, are all driving in the same direction. Lying immediately opposite, in the same direction, is the Oolite, Tabor, and Bush combination, owned by Governor Tabor, W. Bush, William Lovell, the original discoverer of the chrysolite, Mr. George Fryer, and others, and he has been informed by them that active developments are to be immediately pushed forward. Further to the west, in lower ground, is the new shaft, being put down by Mr. Roubesh, one of the principal proprietors of the Robert E. Lee Mine, and his brother, who has charge of the mine, told him they were perfectly satisfied with the prospects they had developed, and that the large shaft already commenced would be actively pushed to completion. He confidently anticipated striking the ore rich in that place, which must necessarily run the whole way underneath the country from the developments on Fryer Hill, including both sides of the Olathe placer claim and the Tabor Bush combination. Mr. Carter adds that the whole and sole question in Leadville is that at the lower depths

there is a considerable amount of water, but strange to say the water seems to develop in wells, many wet mines having dry mines in close contiguity, but this is a simple question of £ s. d. to put up sufficient pumping power when water is found.

PROGRESS OF CORNISH LIMITED MINES.

The following special monthly reports have been forwarded by the directors of the respective companies:—

EAST WHEAL ROSE (LIMITED).

SPECIAL MONTHLY REPORT (Nov. 30).—Innes' lode in the back of adit, east of Foster's shaft, is about 2 ft. wide, and is now producing for lead and blende 30 cwt. per fathom; of the former from 15 to 18 cwt. per fathom. This is important, as it is nearly whole ground to surface, and little or nothing done at any point below this level. Middleton's lode in the adit south is being opened on at two points. No. 1 is at present lying at the back of the east lode. No. 2 is discovered by the crossing of Davis' lode; but at both these points Middleton's lode has produced some splendid work for lead, and we believe it will again do so as soon as the ends are extended sufficient distance as to be free from the influence of the crossing of the lodes referred to.—Penrose's: The engineers are now engaged in heaving in the 90-in. engine, and every effort will be made to complete this as early as possible. The building of boiler-house and stack will be finished (weather permitting) in about a fortnight from this time.—North Wistal Rose: The house for the 100-in. engine is up to the third and last floor, and will also be finished in about three weeks, unless prevented by inclement weather. The work throughout the mines is progressing very favourably.—W. SKEWIS, T. DODGE.

OLD SHEPHERDS MINES.

SPECIAL MONTHLY REPORT (Nov. 26).—At your request we beg to hand you our report in detail of operations being carried on in the above mines:—Western Ground: Browne's engine-shaft has been sunk 16 fms. from surface, and two cross-cuts driven, one north 26 fms., where we intersected the north lode; also a cross-cut south 10 fms., where the south lode was intersected, which has been opened on east and west 16 fms., where the lode will average 3 ft. wide, composed of lead, blende, and muck, altogether of a very promising character; in fact, we never saw the ends on this lode presenting a more cheering appearance than to-day. We have opened east and west on the north lode 5 fms., which will average 3½ ft. wide, composed of lead, blende, muck, and soft prinn spar. As the lead does make more than 1½ ft. from the bottom of the level we do not value the end, but the lode going down in the bottom of the level is worth for lead 12 cwt. per fathom. The indications are sufficient to warrant any reasonable outlay to further prosecute this in depth, as nearly all the lead has been broken from the bottom of the level. The engine is mastering the water very well at this depth, but is not sufficient power to sink deeper. About 30 fms., or midway between Browne's shaft and the western boundary, we are sinking a shaft on the north lode, which is now 7 fms. deep; at this point the lode is 7 ft. wide, composed of sand and muck, everything that can be desired for the production of lead ore. We feel very sanguine of meeting with lead when we reach the blue ground. We have a twofold purpose in sinking this shaft—to prove the lode, and also to ventilate the 16 fm. level. We have also seen the backs of the lodes at three different points between Browne's shaft and the old mines of the east, which produce splendid stones of gossan. Here we purpose continuing operations until we meet with the junction of the lodes previously mentioned in our reports. North Mine.—From where the adit cross-cut intersected the lode we have cleared west on the lode 30 fms., and the level has been full nearly all the way; but for a great many fathoms in length the lode has been taken away, which speaks well for deeper levels. In clearing this we have found good stones of lead and large quantities of muck, and our object is to reach the end as soon as possible. We have cleared east of cross-cut on course of lode 80 fms., and are now near the old engine-shaft, but have not yet been able to effect a communication. The new engine-shaft is sunk and timbered securely 4 fms., and the foundation for engine-house cleaned out; but we have not yet been in a position to commence building, for want of stone; however, the quarry we are now engaged in clearing out is looking very favourable, and we hope to find a sufficient quantity of stone that may be required.—South Mine: We are pleased to say we have effected a communication with No. 17 adit shaft, although we have found it very difficult to get through, the end and shaft being so small and crushed so badly. The shaftmen are still engaged making Harvey's secure down to the water, in removing old timber and putting in new. This we hope will be completed in a week. The masons are engaged in building boiler-house and stack, but as the weather is so unfavourable slow progress is being made. The engineers are pushing on with the 80-in engine with a full staff of men. Green's machinery is now completed and can be set at work as soon as we get water.—R. and J. NANCARROW.

MOUNTS BAY CONSOLS (LIMITED).

SPECIAL MONTHLY REPORT (Nov. 28).—Trebarvah: We have nine men sinking the engine-shaft during the past month. They have put in cistern and fixed drawing-lift from the 40 to the 50, and sunk the shaft 1 fathom. This shaft is now down 2 fms. 5 ft. below the 50; the lode is about 6 in wide, producing occasional stones of copper, with blende and a congenial quartz. We may expect shortly to cut ore in this shaft. The 50, west of the engine-shaft, has been driven during the past month 7 fms. 2 ft.; the lode is about 6 in. wide, producing blende and arsenical pyrites. We have re-set the driving to six men, at 3*l*. 15*s*. per fathom. The 40, west of the engine-shaft, has been driven 5 fms. 1 ft.; the lode is 2 ft. wide. A flooken course has lately fallen in with the lode, and as we are gradually getting through it the lode is changing its character, and now producing stones of copper ore, blende, and lead mixed together, with a congenial quartz; by its present appearance we may expect shortly something good. We have set this end to four men, at 3*l*. per fathom. We are sinking a winze below the 30 to hole to the 40 for ventilation of that end; four men are sinking the winze, at 1*l*. per fathom, and 2*s*. 6*d*. per ton for white spathose iron and arsenical pyrites. The lode is producing about 5 tons of white spathose iron per fathom. During the past month Richard's shaft has been sunk below the 57 fathom level 1 fm. 2 ft.; this is now 3 fms. 3 ft. below the 57. This shaft is sinking by six men, at 20*l*. per fathom. We are pleased to say we have here a capital improvement. The lode in the shaft is about 1 ft. wide, worth fully 20*l*. per fathom; this is a very important point to have an improvement, being in the bottom of the mine. The 50, east of Richard's shaft, has been driven 1 fm. 5 ft. 9 in. during the past month, and have re-set to two men, at 6*l*. 10*s*. per fathom; the lode is 6 in. wide, containing stones of copper ore, blende, and arsenical pyrites. No. 1 stope in the back of the 50, west of Richard's shaft, we have set to two men in tribute, at 1*l*. 1*s*. in the 1*l*.; the lode is worth 1*l*. 1*s*. per fathom. No. 2 stope, in the same level, we have set to four men in tribute, at 10*s*. in the 1*l*.; the lode is worth 8*l*. per fathom. We have set a tribute pitch on the north lode to three men to sink shaft and raise tinstuff, at 1*l*. in the 1*l*. They have sampled a parcel of tinstuff to-day. We have nearly completed the fixing of the extra boiler to the pumping-engine, and repaired roof of engine and other houses. We have commenced to dress a parcel of ore, and shall soon have it ready for sale. The machinery throughout the mine is working very well. We have also put in new footway from surface to the 40.—Sydney Cove: We are driving Browne's lode east at 1*l*. per fathom; the lode is 1 ft. wide, containing a little tin and stones of copper. In the western cross-cut in the past month we got into an elvan course, highly mineralised with iron pyrites and blende; and last week we cut a lode 9 in. wide, producing tin and occasional stones of copper. We purpose driving this cross-cut further north, as it appears strongly mineralised in that direction, as we fancy we have only one part of the lode as yet. The masons have built the bob-pit, and are making fair progress with the boiler-house and stack, but during the past week the weather has been so wet and rough that it has greatly retarded their operations. The engineers are hard at work about the engine, and have placed the 11-ton boiler in position. The carpenters and smiths have made and put the balance-bob in its place, and fixed cistern.

We hope to have the shears fixed in the coming week, and the capstan a few days after. The general surface operations are being proceeded with as rapidly as possible, and are hoping to be able to report shortly the starting to work of the pumping engine.—Pembro: Jones' lode is still about 2 ft. wide, in congenial strata, containing at times spots of lead, iron pyrites, &c. We are still driving on No. 7 lode, at 1*l*. 10*s*. per fathom; the lode is 4 ft. wide, producing iron pyrites, iron ore, and a good deal of quartz; we have no doubt but what this driving will turn out something good by-and-by. At the engine-shaft we have completed the cutting down and putting in durns to the adit level. These men will now be employed about cutting ground for bearers and cistern, &c. The masons have nearly finished the walls of the boiler house, and are getting on fast with the building of the stack, which is up about 30 ft. high. The engineers have commenced to work about the engine. The winding engine and boiler have been brought on the mine, and the surface operations are proceeding very satisfactorily. We are very anxious to get the Sydney Cove and Pembro engines to work, for we feel we shall then be able to report something good to the shareholders.—WM. ARGALL, J. JAMES, J. ROWE.

TRESAVEAN MINES (LIMITED).

SPECIAL MONTHLY REPORT (Nov. 25).—The Tresavean Mine comprises five setts—Treviskey, Tresavean, Trethanup, Brewer, and West Trethellan, all of which are held by different lords, the whole of these are communicated with under the adit; it is, therefore, necessary that we should go through the whole length of the adit to see that it is secure, and that all the surface water is taken up at this level. For this purpose we have gone through about a mile and a half, besides branch levels, and the men are now clearing a choke to the west of East Trethellan, and as I do not know the exact extent of the adit, I cannot tell when we shall finish it. Besides this we have secured eight adit shafts, one of them being 20 fms. deep, which was full of debris for the whole depth, and we were obliged to close timber it 10 fms. from surface. The shaftmen have taken out the whole of the decayed wood in Harvey's shaft above the adit and replaced it with new, this is now ready for dropping the pitwork. We have also secured Old East whim shaft, which will be our principal shaft for drawing stuff from the eastern part of the mine. The men are now engaged in securing Williams' engine-shaft, which will take about a fortnight longer; this shaft will also be used for drawing purposes, there being a good copper lode at the 155 in this part of the mine, where there is a lot of high ground standing.

Surface: The owner's account-men have taken out the rubbish from the boiler-house of Harvey's engine, which was full for 40 ft. long and 12 ft. deep; they have also cleared and secured the lobby leading to Harvey's boiler-house; they have also taken away the old loading from Harvey's engine-house, and taken out the foundation for the steam capstan, and a reservoir is made to secure water for dressing and condensing purposes. The masons have repaired Har-

vey's engine-house, put on a new roof, and built a new loading; the new dry is partly built, as is the loading for the steam capstan, which will be finished in a few days if the weather permits. The carpenters have repaired the flooring, put on wood roofs where required, made the horses for the steam stamps, and are now busy preparing woodwork for Harvey's engine-house. The 90-in. engine is now on the mine, parts of which we had cleaned. The engineer has also arrived, and will erect with all possible speed. I feel confident, from reports I have had from old miners who worked here in the old working and from what I have seen, that in Tresavean you have a good mine, which will no doubt again prove one of the richest in the county.—J. JAMES.

TRESAVEAN.

"Poldice House, St. Day, Cornwall, Nov. 29.
"SIR.—Feeling interest in the welfare of the mines in this district, I thought it would be interesting to you to have some definite information about the prospects in the bottom of the mine, and the authority. Six years ago last Whit Monday I was at Pengreep, when, in course of conversation with Mr. John Michael Williams, the subject, among others, of Tresavean came up, and I distinctly remember his making a statement thus:—'I was at the bottom of the mine with Capt. Joe Jennings about a month before it stopped, and the bottom level for 40 fms. long was worth about 40*l*. per fathom, with black tin at the then price of 40*l*. per ton, and it stopped because the lords wanted to impose a heavy fine for a new lease (the old one then almost expired), and compel us to sink a new perpendicular shaft east (which was not required) with any rebate of dues. I need not tell you this piece of ground now is worth over 60*l*. per fathom, and, supposing it holds only 10 fms. up and 10 fms. down, has laid open 50,000*l*. worth of tin. I am well known to your engineer, Mr. Loan, and also to Mr. John Kendall, who reported on the property for you."
"CHAS. BAWDEN."

TAUNUS SILVER-LEAD AND COPPER MINING COMPANY.

Daisbach, Nov. 30.—We are now making good progress in the rise to the 9 fm. level west (shallow adit) from the 12 metre level; it is now 10 metres above the back of the level—the lode in this rise looks promising, and is producing good stones of lead. The lode in No. 1 rise, in the back of the 12 metre level, is greatly improved, and is now producing 1 ton of lead per fathom; this rise will lay open some very good ground for stoping. No. 2 rise, in the back of the same level (the 12), is also greatly improved, and is producing about 30 cwt. of lead per fathom; some of the lead from the lode in this rise is so pure that I am having it taken to the ore magazine in bags direct. In the winze below this level (the 12) the lode is looking very promising, and has improved in sinking; it is now worth about 30 cwt. of lead per fathom, and the ground is easy for sinking, but I fear we shall not be able to sink much deeper, owing to the water increasing every day. I now think we had better resume the driving of the 40 metre level east, in order to drain the winze in the bottom of the 12 metre level east, and to accomplish this will take two months. We are preparing to drive the 9 fm. level west, which will also lay open good ground. I intend to open several places in the back of the 40 metre level east to test the lode, where I think we shall find it satisfactory.—WILLIAM HOLLOW, Manager.

CASSELL'S PUBLICATIONS.—Science for All, part 49 contains An Eclipse of the Moon, by Professor Simon Newcomb, LL.D., of Washington, D.C.; Colour, by Mr. William Ackroyd, F.I.C., with a chromo-lithographic illustration; A Piece of Black-lead, by Mr. F. W. Rudler, F.G.S.; Hot Ice: the Boundaries of the Liquid State of Matter, by Professor T. Carnelley, D.Sc.; A Brown Seaweed, by Professor E. Perceval Wright, M.A., M.D.; and Sunlight, Twilight, and Halos, by Dr. R. J. Mann. The History of Protestantism, part 30, includes the chapters on the Conquest of North Germany by Ferdinand II. and the Catholic League; on the Edict of Restitution; on the Arrival of Gustavus Adolphus in Germany; on the Fall of Magdeburg and Victory of Leipzig; on the Conquest of the Rhine and Bavaria and Battle of Lützen; on the Death of Gustavus Adolphus; on the Pacification of Westphalia; and on the Fatherland after the War. Knight's Practical Dictionary of Mechanics part 60, extends from Reaper to Resin.

MINING ACTIVITY IN CORNWALL.—There has not been so much industrial activity in Cornwall for some years past as there is at the present moment, and no working man desirous of finding work need be out of employment for a single day. The new mines which have been floated recently are employing a large number of hands, particularly at East Wheal Rose, where there is great activity, and the preparatory work is being pushed on with the greatest vigour, several of the directors having been down this week to the mine. An immense quantity of timber passes through Truro every day to this and other mines. At the present moment there are fifteen engines to be erected for about five of the new mines in Cornwall, including East Wheal Rose, Shepherds Adit, Tresavean, &c., and of these engines thirteen have been ordered from the Hayle Foundry, where there is just now a complete block of work.—West Briton.

Messrs. PRYOR and SON, the well-known mining engineers, Redruth, are engaged in inspecting an important mining property in Spain.

Mr. James Cooper has been appointed official liquidator of the Silver Valley Mines (Limited).

Mr. Harry S. Foster (Foster, Hight, and Co.) has been appointed official liquidator of the Patent Enamel Advertising Company (Limited).

COPPER ORES.

Sampled Nov. 16, and sold at Tab's Hotel, Redruth, Dec. 1.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Mellancar.....	81	£3 10 0	West Tolgus.....	51	£4 11 6
ditto.....	83	3 10 0	ditto.....	42	5 19 6
ditto.....	76	4 7 6	Violet Seton.....	67	3 4 0
ditto.....	75	4 7 6	ditto.....	34	7 12 6
ditto.....	74	4 2 6	ditto.....	33	5 3 6
ditto.....	70	2 13 0	New Cook's Kitchen.....	59	4 2 6
ditto.....	50	1 17 0	ditto.....	23	2 14 6
East Pool.....	62	3 2 0	West Seton.....	28	4 13 6
ditto.....	50	2 16 6	ditto.....	27	4 9 6
ditto.....	44	3 2 0	Wheal Comfort.....	25	3 2 6
West Tolgus.....	52	6 6 0	South Condurrow.....	12	5 13 6
TOTAL PRODUCE.					
Mellancar.....	506	£1794 1 6	New Cook's Kit.....	82	£306 1 0
East Pool.....	158	469 17 0	West Seton.....	55	258 14 6
West Tolgus.....	145	811 17 6	Wheal Comfort.....	25	78 2 6
Violet Seton.....	134	644 8 6	South Condurrow.....	12	71 2 0
Average standard.....	£96 14 0	Average produce.....	7		
Average price per ton.....	1115	Quantity of fine copper, 77 tons 11 cwt.			
Quantity of ore.....	1115	Amount of money.....	£4434 4 6		

LAST SALE.—Average standard, £ 95 0 0 | Average produce..... 7
Standard of corresponding sale last month, £97 11 0 | Produce, 6½

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Name.	Tons.	Amount.
Vivian and Sons.....	273	£106 3 3
Grenfell and Sons.....	221	935 2 0
Nevill, Druce, and Co.....	221	820 14 9
Williams, Foster, and Co.....	271	1173 0 6
Mason and Elkington.....	116	459 4 0
Total.....	1115	£4434 4 6

NO SALE on Thursday last, Dec. 8, or on Thursday next, Dec. 15.

COPPER ORES.

Sampled Nov. 23, and sold at Swansea, Dec. 6.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Garonne Ore	231	75	£4 17 6	Virneberg	14	6½	£4 0 6
ditto	112	75	4 17 6	Tan-y-Bwlch	31	4½	2 6 6
Caveira Ore	227	5½	3 3 6	ditto	43	4½	2 10 0
ditto	76	5½	3 2 6	Copper Pre.	38	61½	42 10 0
ditto	76	5½	3 3 0	ditto	34	64	43 11 0
Berehaven	73	9½	6 7 6	ditto	41	70½	47 0 6
ditto	73	9½	6 5 6	Copper Ashes	23	4½	2 6 6
Virneberg	3	22	14 9 0	Copper Ore	19	242	14 6
ditto	31	18½	6 10 6	Caveira Precipit	8	78½	11 0 0
ditto	64	8½	5 6 0	Copper Matte	7	22½	13 18 6
TOTAL PRODUCE.							
Garonne Ore	231	£1126 2 6	Copper Precipit	113	£5023 14 6		
Caveira Ore	227	715 1 0	Copper Ashes	23	46 11 6		
Berehaven Ore	146	923 9 0	Copper Ore	19	242 14 6		
Virneberg Ore	112	696 19 6	Caveira Precipit	8	408 4 0		
Tan-y-Bwlch	74	182 13 6	Copper Matte	7	97 9 6		

NO SALE Dec. 20.

TOTALS AND AVERAGES.
21 cwt. Produce. Price. Per unit. Standard
Whole sale ... 960 ... 15½ ... £9 17 1 ... 13*s*. 0*d*. ... £37 9 0

Lady Rashleigh Consols (Limited).

CAPITAL £20,000, IN 20,000 SHARES OF £1 EACH.

Payable—2s. 6d. on application, and 5s. on allotment. The remainder as required.

DIRECTORS.

Alderman WILLIAM EDWARDS, J.P., Wolverhampton, Chairman of East Roman Gravel Lead Mining Company (Limited).
ALEX. FOWLER, Esq., Harley-street, London, W., and Bridge of Allan, N.B., Director of the Organos Gold Mines (Limited).
RICHARD HENEGAN LAURIE, Esq., Temple, W.C.
The Hon. WALTER SUGDEN, Putney, S.W.

BANKERS—THE ALLIANCE BANK (Limited), Bartholomew-lane, E.C.

SECRETARY AND OFFICES—Mr. J. J. ALLBROOK, 32, WALBROOK, LONDON, E.C.

ABRIDGED PROSPECTUS.

This company is formed for the purpose of acquiring, developing, and working the Lady Rashleigh Tin Mine, St. Blazey, Cornwall.

The property has an area of about half a mile square, and the royalties are 1-24th only.

This property possesses natural advantages which are probably unequalled by any mining property in the district. By means of the adit level (which is being driven in at the foot of the hill), the mine will be drained and the ores will be conveyed to the dressing-floors without the aid of machinery. A large preliminary outlay of many thousands of pounds in pumping and winding machinery, in addition to a permanent annual charge, will thus be saved. The only motive power required will be for stamping and dressing, and this will be supplied by water, of which there is generally an abundant supply.

There is every facility for transit. Immediately adjoining the dressing-floors are a cart road and a branch of the Cornwall Minerals

Railway, by which material and produce can be conveyed at a nominal cost to and from the mine.

With all these unusual advantages, and the fact of the mine being in a forward state of development, the directors feel assured that returns of tin can be made and a dividend returned within a few months, and they have no doubt, having regard to the small amount of capital employed, and the low cost at which the mine can be worked, that the dividends will be highly remunerative.

The property has been inspected and reported upon by the well-known Capt. Josiah Thomas (Dolcoath Mine), Mr. Brenton Symons, C.E., F.C.S., &c., Captain Richard Pryor (of Hedruth), Captain Philip Rich (of St. Blazey), and Captain John Phillips (of Newlyn). All the reports may be seen upon application.

Full prospectuses may be obtained upon application to the secretary or bankers.

The directors invite intending investors to visit the mine and inspect the property for themselves before applying for shares.

FOREIGN MINES.

ST. JOHN DEL REY.—The directors have received the following telegram from Morro Velho, dated Rio de Janeiro, Dec. 9: Produce for the month of November, 28,500 oits., value, 11,043; yield, 5.2 oits. per ton.

QUARZIL HILL CONSOLIDATED GOLD.—Telegram received from the company's agent, dated Dec. 6: "Week's return, 55 ozs. troy, and \$260."

LAST CHANCE.—Dec. 8: The Last Chance Consolidated Silver Mining Company (Limited) have received the following telegram from their agent at Salt Lake: "We have during last week run 35 ft. in tunnel. No. 3 Oupent Mine ore continues about the same."

BON REDDIO.—A telegram dated Rio, Dec. 7, states that the produce for November was 950 oits. Mr. Heilbuth writes under date Nov. 11: Explorations are progressing as already advised. The branch of box work out and mentioned in P.S. of former letter, did not hold out to any extent, it being one of the various branches from time to time encountered, which up to present have not been found to continue any distance, although we are glad to find them as they are. The general aspect of the ground explored to date is favourable.

PITANGUI (Gold).—Mr. T. S. Treloar, Pitangui, Nov. 3: The progress made in the second level south at the 30 has been so good that this level is now in advance of the first one, and both are letting down torrents of water. This circumstance, I am very pleased to say, is telling upon the upper part of the mine, the water therefrom not coming back so far towards the Ouro Podre shaft by nearly 60 fms. as it did only a fortnight ago, thus showing that the ground ahead of these levels is now draining very rapidly. In addition to this I have further pleasing intelligence to communicate; explorations we have been prosecuting south of Holland's shaft have resulted in our finding large crushed workings at a depth of 25 fms. from the surface, and according to present indications the ore is every prospect of our making important discoveries therein.

RICHMOND CONSOLIDATED.—Cablegram received from the mine at Nevada, Dec. 6: "Week's run, \$40,000, from 757 tons of ore. Refinery, \$40,000."

—N. Wescott, Nov. 16: The work of development in the above mine since my report, one week ago, is as follows:—The west drift, 200 level, near shaft has been run 7 ft. in limestone. The north-east drift, 200 level, has been run 7 ft. in limestone. The north drift, 300 level, has been run 13 ft. along fissure in limestone; ground looks favourable for ore. The north drift, 400 level, from No. 11 chamber has been run 11 ft. in hard limestone. The west drift from the bottom of the 30-ft. winze, below the 600 level, has been run 13 ft. in low-grade ore. The east drift from bottom of 50-ft. winze, below the 600 level, has been run 16 ft. in ore of a fair quality. The north drift, 700 level, under No. 13 chute, has been run 13 ft. in limestone—looks well for ore. The north drift from shaft, 1200 level, has been run 25 ft. in quartzite; no change since last report. The south rise from the 200 level, new shaft, has been extended 8 ft. in broken ground and small caves; some ore. The south-east rise under No. 14 chute, 600 level, has been extended 9 ft. through ledge matter. The rise from the 600 level, 62 ft. east of fissure drift, has been extended 30 ft. through ledge matter, and looks favourable for ore. The ore chambers are producing the usual amount of ore, and are holding out well.

RUBY AND DUNDERBERG CONSOLIDATED.—Report on the mines for the week ended Nov. 13: Dunderberg: The No. 7 ore body, below the 700 ft. level, is not looking so well, the ore is very low grade, and considerably smaller than it has been. The winze below the north drift, from No. 2 chamber, 30 ft. below the 600 ft. level, is now down 10 ft. in good ore, about 2½ ft. wide. A cross-cut has been commenced from the north drift, from No. 2 winze, 35 ft. below the 600 ft. level, to make connection with the above winze. The No. 6 ore body, below the 600 ft. level, is looking fairly well, and is producing nearly all the ore taken from the mine at present. The north drift from bottom of No. 5 winze in favourable ground for drifting; progress this week 20 ft., total, 81 ft. from the upraise from the 700 ft. level. The upraise above this drift has been continued up 30 ft. in fair grade ore, from 1 to 4 ft. wide, and is now connected with No. 6 ore body. Another upraise has been commenced from this drift at a point 30 ft. north of the present one; it is now 12 ft. in low-grade ore of no value. We have shipped 86 tons of ore, and have now 31 men and 10 tributaries at work.—Bullwhacker: The north slope above the 325 ft. level is producing about the usual quantity of ore. The quality is considerably better, and I think it is the best ore ever taken from the mine. We have shipped 32 tons this week, and have about 20 tons at the mine ready for shipment.

Dec. 6: Copy of telegram received from Eureka to-day: "The week's run from the furnace was \$9000, from 133 tons ore, producing 32 tons of bullion. Furnace now closed. The shipments of the week were 92 tons."—N.B. The furnace being now closed the shipments are entirely from the company's mines.

TAUNUS SILVER-LEAD AND COPPER.—Wm. Hollow, Manager, Dalsbach, Dec. 7: I have commenced the driving of the 9 west, by three men; the lode is looking very well, and is producing 1 ton of lead per fathom. We are repairing a rise in the back of this level (the 9), in order to accommodate very good ground that I think is lying in that direction. I have communicated the rise in the back of the 12 metre level west with the adit, and are now rising in the back of the same; here we are in some old men's workings, who have taken away the lode for about 2 or 3 fms., then I have every reason to think we shall come into the same quality ground as we have in the end of the 9 fm. level. The lode in No. 1 rise, in the back of the 12 metre level east, is looking very well, and is producing 1 ton of lead per fathom; the price for rising is 25s. per fathom. The lode in No. 2 rise, in the back of the same level (the 12), looks very promising, and is producing 20 cwt. of lead per fathom of high quality; price for rising 25s. per fathom. The lode in the winze below this level (12 metre) looks very well, and will produce 30 cwt. of lead per fathom. We are obliged to suspend the sinking of this on account of the water having increased. We are now driving the 40 metre level east, by three men; the lode in this end has improved, and is now producing good quality silver and copper. We have opened on the lode in the back of this level (40 metre) in several places, and find it to produce silver-lead and copper.

POTOSI.—Telegram from the mines, Dec. 3: Between 800 and 825 tons of quartz milled. Remittance between 500 and 600 ozs. of gold: 23 days full work. Mill stopped for repairs.

ISABELLE (Gold and Silver).—The company have received the following advice from their manager, Mr. Lewis Chalmers, dated Nov. 14: "I wrote you last 14, and have now to report for the information of the board that the woodwork of both agitators is now set up, and that to-morrow we commence putting in the machinery which runs them. Mr. Argall, our new foreman, and four Cornish men went to the mine last afternoon, and to-morrow they commence repairing the house for winter, fixing the ore shoot, and making road to them. Mr. Argall is much pleased with the mine, and says there will be no difficulty in furnishing ore enough to run the mill."

The following telegram has been received from the manager at the mines: "Remittance received. Hired three additional ore teams. Will commence milling within 10 days. Jon's wants Isabelle stock for his thousand."

EUREKA (NEVADA) SILVER.—Report on the mines for the week ended Nov. 14: Bald Eagle: Work has been suspended at this mine during the last four days owing to a break in the steam-pump, which is now repaired; work will be resumed to-morrow. The upraise above the north drift, from the west cross-cut, has been advanced 17 ft. without any improvement; the ground is very soft and easy to work, and contains some particles of ore. The north drift from the east cross-cut has been advanced 12 ft. on this fissure; total 158 ft. from the east cross-cut. The upraise on the fissure to connect with the old stopes has advanced 6 ft.; work will be commenced on the bottom, or 300 ft. level, to-morrow.—Williamsburg: We have shipped 14 tons of ore during the week, and have about 5 tons at the mine ready for shipment. No change in the stopes.

SILVER HILL.—The managing director has just returned from the mines, and in forwarding his report and that of the resident superintendent to the shareholders the board state that they had quite anticipated that by this time they would have been able to state that the mines were in full working order, but these anticipations have not been realised owing chiefly to the late period of the season when the managing director obtained possession of the company's property, to the difficulties experienced in obtaining timber for fuel, and to the time occupied in repairing and putting in the ordinary machinery already on the mines. The directors observe that Mr. Taylor adheres to his previous opinion of the great value of the property, and though but little progress can be made in development before the spring, the driving of the tunnel, which is a work of great importance, will continue during the winter. Mr. Taylor in his report states that in July last he ordered a concentration mill, but the machinists were unable to get it out before the winter set in; they have, however, arranged to have it out early in the spring, by which time he fully expects there will be a large pile of ore to treat. He saw the machinery (which is now ready to be shipped from Arlington Works, Jersey) before leaving America, and got it stored to the company's order. It is the best finished he has seen, and will be sent out

early next spring. He also purchased a patent melting furnace, with firebricks and all the apparatus, quite new (not having been erected) for \$3000, the market price being \$10,000, besides cartage from New York, the firebricks alone costing \$2635; this is a saving to the company of at least \$10,000. The smelting furnace is now on the company's premises, and will be erected the early part of next year. Mr. William McFarlane, the resident manager, reported (Nov. 1):—One lode, the J. B. Norris, is a fine masterly lode about 40 ft. wide, and will doubtless yield a rich return, the others I cannot say much about until they have been worked, but I think they will prove rich. I have also examined all the lodes at surface, and judging from the large outcroppings of quartz and mineral, of a general character, they are unquestionably true fissure veins, and will, when cut, be found to be of immense value. I am on this point borne out by all mining experts who have seen them. I hope to be able to report something good shortly, as I think I shall cut another lode in about 100 ft. from the present end.

PIERREFITTE, Dec. 3: The ground in the adit level in the south mine is somewhat harder for driving. No important change has taken place in the stopes. In the north mine the cross-cut south appears to be entering a portion of the lode which contains blende, which clearly shows the end has not yet passed through the whole of the lode. What the value of the lode is remains to be proved; so far as seen it contains, as before stated, 3½ tons of good lead ore per fathom. The lode in the No. 1 winze below the No. 1 level yields 5 tons of good blende per fathom. It is also spotted throughout with lead ore. The latter, however, is not at present in sufficient quantity to value. In the No. 3 level a slight improvement has taken place in the lode for lead ore. The usual progress has taken place in the cutting the route from the mouth of the lode towards the cable station. No material change has taken place in the weather to affect the water supply. Indications, however, are reported to exist which bodeken breaking up of the drought. I hope the prognostications will prove correct. Last night at this time I know we were deluged with water both over head and under foot.

COLOMBIAN HYDRAULIC.—E. S. Jones, Oct. 20: Run No. 79: All preparations for cleaning-up were completed, when, on the 17th inst., an accident occurred on the Malpasio ditch which prevented our washing up. Nearly 80 ft. of flumes broke down, which will take a week to repair, so I am obliged to defer the clean-up until the end of the month, when I will send you the results, and also the diary and water account by the intermediate mail. I have sent nearly all the men to repair the damage, and kept a few working to bring up the cut to continue the sluices ahead. During the month we have been cutting through the pipe-lay, and pushing this work as far as possible, and now the water is off we shall advance the work considerably. We have now completed washing away all the tailings, and we shall shortly commence piping on better gravel. I am carrying a channel as narrow as it is safe to do, leaving a sufficient space to deposit rocks that do not run down with the water.—Upper Mine: The pipe is nearly ready to turn on the water when required, that is, after the lower sluices are connected with the upper ones, so that the rocks, &c., may run clearly through to the outlet.

—E. S. Jones, Oct. 29: Malpasio, Run No. 29: On the evening of the 26th inst. the broken flumes at the ditch were repaired, and on the 27th we commenced cleaning-up, and continued as far as gold could be found—that was 300 ft. from the end of the sluices. This gave nearly sufficient to pay one month's cost, which, as you will observe, shows an improvement on the previous month's. We only worked on gravel one month, and the other, as you know, was spent in running down tailings. We will shortly complete washing the rest of the waste and commence piping again in sound gravel, the prospects of which are very favourable. During the month the cut on the pipe-lay has been advanced more than 200 ft. We have a gravel bar at the end of the pipe-lay to excavate to the depth of the sluices before these can be continued, with the exception of 80 ft. which are now ready. Up to the present time we only have had to blast a few boulders, and most probably no grade will be lost.—Upper Mine: The pipe is ready, and the water can be turned on at a moment's notice. Timber is being got ready also to connect the sluices, as, until that is done, no work can be commenced, otherwise it would interfere with the progress of the new opening.

SAN PEDRO.—R. F. Pechey, Oct. 1: San Pedro Shaft: During the past month the shaft has been sunk 15 to 16 ft. to the 150, with the exception of a couple of days' work still required above. The most important point was to communicate with the water about 2 metres below the 150. The skip-rail has been successfully carried down from the 135, and on the 29th the preparations for drawing water were completed, the road being dropped from the couple of metres below the 150 to a point about 40 ft. below the surface of the water. This operation, which necessitated very considerable contrivance, was carried out successfully without any mishap, the timber and rubbish that covered the surface of the water having been previously removed as far as possible. A line 46 ft. long and weighing 100 lbs. was used to draw the water without encountering any obstacle to that depth. Here again the most sanguine expectations have been realised, as it was a grave question how far the shaft from the 150 to the 165 might have been filled up by the falling in of the sides, rendering it impossible to draw the water without the aid of pumps; 46 ft. of water shows that this portion of the shaft is clear for half its depth, and possibly the obstacle at this point may be merely closed by timber jammed in the shaft, and may be easily removed. The road works admirably under water, and the skip delivers 140 gallons of water at the adit every eight minutes. The shaft is secured from the 150 to the water level. I was down below this morning as far as the water, and was exceedingly well pleased with the work performed, and the successful issue of the month's operations. The work of repairing the shaft may now be considered accomplished, in so far that no accident can now occur to upset calculations, and so materially retard it. In a few more weeks we shall prove to the satisfaction of many in this country who entertained doubts that the re-opening of the San Pedro shaft is not only a possibility but an accomplished fact.

San Antonio: S. Lean, Oct. 1: Since my last we have driven south on the lode 8 metres, lode 2½ ft. wide producing stones of ore but not to value. Chiffon sinking in the bottom of the north, and has been sunk during the month only 2½ metres, where we met with a mantle highly mineralised which let down the water from the level above, consequently we had to suspend the sinking for the present. In the end and chiffon we have the same class of strata which were in some of the richest places in San Pedro. In San Antonio we have to extend our level to get under the metal bearing mantos and cut some of the cross-lodes and mantos which underlie in different angles, as can be seen at the surface and have not yet been cut below. We have in the end a splendid looking lode, but as yet, I regret to say, not a paying one, but from present appearances we may soon expect an improvement.

San Pedro: Telegram: R. F. Pechey, Dec. 7: The San Pedro shaft is repaired within 5 fms. of the bottom of the mine.

BRATSBURG COPPER.—John Daw, A. W. Daw, Nov. 29: In handing you our monthly report we beg to state that the Murchison shaft is sinking in a good lode, the same being about 3 ft. wide, composed of quartz and rich copper ore, worth 3 tons, or 36½ per fathom; at times during the past month the lode has been worth 50½ per fathom. We have two stopes working to the east of this shaft: the lode is 2½ ft. wide, and will yield 1½ ton, or 15½ per fathom. In No. 3 adit the lode is looking well, the same being 2½ feet wide, composed of quartz and copper ore, and is worth 1½ ton, or 15½ per fathom. The winze, sinking about 5 fathoms behind the end of the lode, is 3 ft. wide, and is worth 15½ per fathom. The stopes in the back of this level are yielding about 1 ton, or 12½ per fathom. In the middle adit the lode is 2½ feet wide, worth 12½ per fathom. In No. 2 adit, the lode is about 2½ ft. wide and of a very kindly appearance, yielding stones of rich ore, but we put no value on it. In the winze sinking in the bottom of this level the lode is 2½ feet wide, worth 12½ per fathom. The stopes are yielding very fairly at this level, and worth about 1 ton, or 12½ per fathom. The cross-out we are pushing as fast as possible; also making the tramway from No. 3 adit to the dressing-floors. We hope to finish the planing of this road in the course of a fortnight from this date. During the past month we have driven and sunk 16 fms. 4 ft., and have staked 81 fms.—total, 97 fms. 4 ft. We consider this has yielded over 100 tons, worth, at present prices, more than 12½ per ton. The cost will be about 800½ by the time the ore arrives in England. The profit is about 500½. The weather is very favourable for all our work.

SENTEIN.—Report for the month of November Crude ore raised from the mine, 757 tons of 1000 kilos. Crude ore sent from the mine to the dressing-floors, 1322 tons of 1000 kilos. Crude ore dressed, 615 tons of 1000 kilos. Bagging and tailings dressed, 106 tons of 1000 kilos, equal to 715 tons of 1000 kilos. Market lead ore produced, 1st class, 52 tons of 1000 kilos; 2nd class, 15 tons; blende ore produced, 1st class, 120 tons of 1000 kilos.

—M. Scantlebury, Dec. 1: In No. 5 end the lode is composed of capel and quartz, with a little blende and lead ores; set to four men for the sum of 150 fr.

per metre courant. The lode in No. 1 slope in bottom of No. 4 level is 11 ft. wide, and worth 8 tons of lead and blende per cubic fathom; set to six men for the sum of 20 fr. per metre cube. In No. 1 slope east of No. 1 rise in back of the level the lode is not quite so productive, worth now 4 tons of lead and blende per cubic fathom; width of lode 10 to 12 ft. In slope No. 3 in back of this level the lode is 14 to 17 ft. wide, and worth 2½ tons of lead and 3½ tons of blende per cubic fathom. The slope in old workings in bottom of No. 3 level at the point where the No. 2 rise from No. 4 level is holed (which I referred to in my last) we have cut through the piece of lode left standing in several places, and find the parts productive to be from 9 to 11 ft. wide, which is worth fully 3½ tons of lead and 4½ tons of blende per cubic fathom. Since No. 15 we have with six miners raised 250 tons of good quality ore from this slope; there is at least left standing 1000 tons of crude ore. There are ten men working here on daywork at 4 fr. 50 c. per day (1 fr. extra), the hanging ground being so heavy and requires timber, which is the reason this place is not set on contract. With the ten men we shall get on an average 25 tons daily. During the past two days the lode in No. 2 end in No. 2 level is opened out a little, and showing a better separation between the limestone and schist; is now 1 ft. 6 in. wide, composed of blue capel, quartz, munde, and spots of blende and copper ore; set to four men for the sum of 120 fr. per metre courant. In No. 1 slope in bottom of this level the lode is much harder, and not so large, worth 1½ ton of lead and 3 tons of blende per cubic fathom; set to six men to slope for the sum of 25 fr. per cubic metre. The inclemency of the weather is driving away our miners, but we are making the best of the staff at our command to get all the ore broken at the mine sent to the dressing-floors; there are about 80 tons left. We have about 2 ft. of snow at the mine, but up to this the cable is kept working; the moment we get any more snow we shall have to stop sending down ore for this year. For the past month there has been sent to the board 1322 tons of crude ore, and for the past nine months 8917 tons. During the past nine months we have broken 3785 cubic metres of the lode, which has produced about 9000 tons of crude ore, of which, as stated above, 387 has been sent to the dressing-floors; this shows an average of 2380 kilos. per cubic metre, calculating a cubic metre of the lode to weigh 3365 kilos; a little over two-thirds of the quantity broken has gone to the dressing-floors. After a careful examination of the mine I estimate the output for the coming year will be most probably 10,000 tons of crude ore, averaging in quality that produced during the past year. During the winter season we shall push forward with all possible speed our researches, and thereby with success be in a position to increase the above figure.

POTOSI.—The directors have a telegram from the mine dated Dec. 3: "Between 800 and 825 tons of quartz milled. Remittance between 500 and 600 ozs. of gold: 23 days full work. Mill stopped for repairs."

NORWAY COPPER.—The directors have received the following telegram from the company's property in Norway, which will be of interest to the shareholders. Getting into another wave of ore at the bottom of the shaft, also the west 72 level. The manager, Mr. Seecombe, is very pleased with the prospects of the mine, and thinks the general indications very satisfactory.

GOLD COAST.—The directors have advice from their manager at the mine dated Abontyako, Oct. 23, which give the result of washings of samples of ore extracted on Oct. 11 and Oct. 18 respectively. On Oct. 11 the yield was—From layer No. 2, 12½ and 6½ per ton; and from layer No. 3, 20½, 4½, 2½, 9½, and 7½ per ton. On Oct. 18 the yield was—From layer No. 2, 20½ per ton, and from layer No. 3, 12½, 4½, 2½, and 7½. The average of each day's washing gives very nearly the same value—a good test of the accuracy of our washing and the uniform character of the stuff washed. It is considered by competent judges that there is not the slightest doubt that they will get 10½ per ton all round, and the manager says they can easily work up to 100 tons per day.

HOOVER HILL.—Extracts from resident engineer, dated Nov. 22: I beg to confirm my letter dated the 15th inst., and my cable of yesterday. "Gallimore still looks well—drills at work on it." It is with great satisfaction I am able to inform you that the richness of the ore in the bottom of Gallimore shaft still holds on, with every prospect of continuation. I may say that the ore is now steadily sinking, and no further interruption. When the drills were first started, and four and five shots fired by electric battery at once, we found the jar so great as to seriously interfere with the old framework in the upper part of the shaft, and had to discontinue working the drills for a few days during the week to make things more secure above. A small experimental roasting furnace is almost completed, by which I intend roasting our rich ore thoroughly before treating. The following cablegram was received on the 5th inst.: "Gallimore still good."

MICHIGAN COPPER.—Capt. John Opie, Nov. 22: Batters' shaft is down to the depth of 48 ft. We have just passed through the lode, and are in the dark trap. Batters' shaft is cut down, enlarged, and timbered, and secured below the adit level. The improvement in this shaft will give us the opportunity to work two skips and use our pumping gear to best advantage, and leave us ample room for a good ladder road. In this shaft we have 14 men employed at present. Above the Buack or No. 1 level we have four men engaged in stoping. The lode is 6 ft. wide, and yields good mill work. Four men are also engaged in No. 1 level driving east. Here the lode disappears behind a crossing vein, but there is no doubt that with a few feet driving we shall recover the vein, and have the pleasure of reporting a good shaft. In office shaft No. 1, lode is now about four weeks four men have driven 18 ft. through a good lode. Here the lode is very large and rich in copper. This end is opening up a good and profitable piece of ground. On No. 1 east the lode presents a promising appearance for copper. We have four men engaged driving this end, with a view to communicate with the main shaft. This end is urged on with all possible speed, as it will thoroughly ventilate this part of the mine, and place us in a position to sink office shaft, and also give us the advantage on No. 2 lode. Until this object is accomplished we cannot put any more men to work in this part for want of ventilation. The two engines and crushers are in readiness for work, and all the stone breakers near completion. We have the ground levelled for laying out the jiggers, buddles, &c. The main hoisting is completed and covered, and to this we shall connect our shingle and planing machines, also our turning lathe. This engine is put up with a view of working main and office shafts, and when we have reached the desired object of tunnelling from office to main shafts this engine will then be employed in drawing and pumping from these shafts, and the horse whim used at present discarded. In the meantime we shall run our shingle and planing machines also our turning lathe. This is necessary for the removal of the saw mill to the little lake, where we shall have a greater command of logs for sawing purposes. You will see from the above that we have four engines completed, with the exception of the steam-pipe connections and inspirators. Had we been supplied with these as early as we anticipated I should have had the pleasure of reporting all the steam-engines in operation. The road from the harbour to the mine is cut through and is cleared of logs to within a mile of the mines. We have put up posts and placed a telephone wire from the harbour to the mines. It has been in operation eight days, and gives entire satisfaction. We have received the greatest pleasure in our provisions. They are at the mines, and safely secured. As present there are four men and boys employed under the company. There are at present on the island about 220 persons to be supplied from our stores, women and children included.

INDIAN GLENROCK GOLD.—I have the pleasure to hand you a report on the progress of work done during the fortnight ending Nov. 5: Swamp tunnel is being pushed on as fast as possible, but there is no alteration in the ground. At Kurumbur tunnel the rock is a little easier for progress and continues letting out water freely, but is poor for quartz. Some men are being employed clearing down through the old workings on branches from surface a few fathoms ahead of the tunnel to ascertain how they appear and their position with regard to the tunnel. At Plantation tunnel the ground is much softer and continues to be mixed up with large branches of quartz of a very promising appearance, letting out abundance of water, and it is our impression, as stated before, that these branches belong to the main reef. Every effort is being made to push forward this drive, and I hope to be able by next report to give you a definite opinion on the subject. Since my report on the 22nd ult. I have cut into the reef from bottom of Plantation shaft for a distance of about 7 ft., and find its appearance to be very encouraging. The drive is being continued towards the tunnel by the footwall side of the reef. Manager's tunnel, which was driven for a distance of 2 ft. 6 in. to Forest tunnel south, on Engineer's reef, is rather slow for progress at present, but on the whole the reef is looking better. Driving has been resumed in the tunnel which cut the reef referred to above for the purpose of intersecting another reef a few fathoms ahead.—Explorations: The tunnel mentioned in last report on Bungalow Hill has been driven since about 18 ft., but I am sorry to say the reef is much smaller.—Glenrosa: No. 2 tunnel is in easy blasting ground, and fair progress has been made by the coolies working here during the last fortnight, they having driven nearly 1 fm. The drive is mostly on quartz branches, probably droppers from the main reef. In No. 3 we are still driving on the reef, which looks uncommonly well. The quartz being streaked with bands of iron, and containing rich pockets of pyrites, over 7 ft. has been driven for the two weeks. The shaft has been sunk nearly 8 ft., and is now in softer ground, having passed through the quartz reported in my last. I do not think this quartz we have cut through is the main reef, and we are, therefore, still sinking. The New tunnel, or No. 4, is now advanced 23 ft. from the mouth, and has passed through about 3 ft. of very excellent looking quartz, having a hard gneiss for its hanging-wall, which looks favourable for this reef being a true fissure vein, which we have been lately hearing so much about in our work in the Wynad. All other work is going on satisfactorily. The following are the drivages since last report:—Swamp Tunnel driven 4 ft. 4 in.; Kurumbur tunnel, 6 ft.; Manager's tunnel, 24 ft.; Plantation tunnel, 18 ft. 8 in.; Plantation shaft drive in course of reef, 10 ft. 6 in.; cross-cutting through reef, 7 ft.; No. 2 Forest tunnel south, of reef, 4 ft.; No. 2 ditto east of reef, 20 ft. 3 in.; Glenrosa shaft sunk, 1 ft. 6 in.; Glenrosa tunnel driven, 4 ft.; tunnel east in Bungalow Hill, 18 ft.

DINGLEY DELL ESTATES AND GOLD.—Nov. 11: The heavy rains have still further impeded our progress at No. 1 reef, but it is a matter of little consequence as we shall employ the same men to open up No. 4 reef, and we have quality. At No. 3 reef we have exposed it on the top for 80 ft. in length, and so far as we are able to judge from appearances it is a massive outcrop of quartz; the deepest point attained is 14 ft., where the lode is not in any way diminished in size, and shall lose no time in showing up No. 4 reef. Should have gone over Fletcher's application ere this, but any attempt would be futile, owing to the thick jungle in this direction; we have commenced to cut a road to it, and as soon as completed I will go over and report on it. For the past two or three days there have been some heavy rains, and a good deal of damage to our new roads; we are now busily engaged getting them repaired before the machinery can possibly be got over them. I am afraid this will greatly retard the heavy machinery which is now on the road from Bepore—two engines and a stonebreaker. In some places the roads are so soft that the carriage of anything heavy is almost impossible. Very good progress is being made in the erection of the machinery we have on the mine. I trust you will not get impatient as the country is very difficult for getting materials into. If there is anything you wish us to do more than is previously mentioned I shall be pleased to hear from you.

COALA GOLD.—Capt. Roach (Nov. 14) writes: No. 1 shaft is sunk 72 ft., and we are now driving north and south on the lode. The lode in the south drive is 18 in. wide, but not so large in the north drive. The ground is still hard, as last reported, and I do not anticipate much improvement until we get into a better and more congenial ground, and I think we shall not be long before we reach it. At No. 2 shaft the depth is 72 ft. The cross-cut west from shaft is driven 42 ft.; here we are driving north and south on a lode, and have opened out on its course 16 ft. The width of the lode for the 16 ft. drive, good washings of ore, 13 to 18 in., but to-day it is 2 ft. wide, and producing good washings of gold; this discovery I consider very encouraging. We have very good ground on the surface about 25 tons of it. In the cross-cut east from shaft we have met with several strings or branches of quartz, and during the past week we have had some

CAMBRIAN MINING COMPANY,
LIMITED.

The following is Mr. Joseph Fell's latest:—

33, Victoria-street, London, S.W., December 6, 1881.
To the Shareholders of the Cambrian Mining Company (Limited).
I must again trespass on your patience to answer the circular of Mr. Adams, dated December 3rd, and headed "Lay on, Macduff."

The ordinary effect produced, on even the least educated, by the reading of Mr. Adams's circulars, is a kind of nausea similar to that experienced from the odour of foul drains. Phew! Phew!

I took up his last with a similar fortitude I summon up when having to pass a cesspool, and figuratively putting a moral pocket handkerchief to my nose, prepared to read. A feeling of surprise soon came over me, for in the print before me I saw myself spoken of as Mr. Fell. Now Mr. Adams has never been guilty of such politeness, but, without the manners of a scavenger, has always spoken of me as "Fell." I now began to doubt the authorship of the circular. I read on. I read several paragraphs without any very glaring grammatical errors. I then knew that Mr. Adams could not have written this portion of the circular. There was the same entire absence of truth; the same swagger; the same vicious misrepresentation (expressed in legal phraseology, hitherto wanting); the same bounce, and in short, the whole "bag of tricks," excepting that crass, dull ignorance peculiar to the epistles of Mr. Thomas Adams, which are enlivened only by his disgusting comparisons to fleas and their bites—see previous circulars.

I read on. At last I discovered the unmistakable cowardly composition of Mr. Adams; but his circular of Dec. 3 is evidently a dual task. The reference to "dilapidated humanity" is evidently not intended for myself, but, nevertheless, I can but hope it was written by Mr. Adams, who has only one—but no, I cannot descend to his level.

The circular now under review contains the usual mystifying contradictions. For instance, it is stated "The board of the new company have resolved that not a shilling of the preference capital shall find its way into the pockets of Mr. Fell or any other dissident shareholder, and they will not, therefore, execute the agreement of the transfer of the mine in its present form." Now I ask, can there be any better proof than this statement that my action has brought about a considerable alteration in the proposed scheme of spoliation. Let me now direct your attention to the following subtle statement, the great importance of which is attempted to be hidden.

"On the contrary I have this day, under the advice of most experienced counsel, concluded with the board of the new company an arrangement which will enable me to proceed with the development of the mine at once, and I shall subsequently carry out a new agreement with them, which will secure to you exactly the same benefits as would have been derived under the proposed agreement, and Mr. Fell will be utterly unable to prevent my doing so."

What does this mean? If it be an honest arrangement, why not inform the shareholders the particulars of it? Why does Mr. Adams always prefer such dark and devious ways? Is it not because his actions will not bear the light of day or exposition? I, however, can read between the lines, and see plainly the cloven hoof. Would that all Cambrian shareholders were endowed with the same perception. The circular continues—"Liquidation having been resolved on, and the order made, it is too late, and he knows it is too late, for him to stop it." Mr. Adams is not content with having forced you to destruction, but he insults you by thus flaunting the fact before you. Further on, in one of his usual graceful references to myself—"As to entrusting him with the entire management of the mine, you have seen in the past what entrusting him and his nominees has resulted in." During the existence of the Cambrian Company, I, of course, never had the management, but previously, while the mines were in my possession, I had, and the best proof that I can give of my ability was the fact that I bought them for 225,000, and in a short time, from the valuable discoveries made under my guidance, I raised their value to 70,000, and even Mr. Adams has promised to realise for the shareholders a profit of 61,200, per year. When such result is obtained, Mr. Adams must necessarily be a much wiser man than at present. I can only hope that he will then see that the sum of 70,000, was perfectly inadequate for such valuable mines, and will suggest to the shareholders of the time to reasonably compensate me. In another paragraph the circular before me says—"If any shareholder has been so silly as to be led away by Fell's circular, (here observe the beautifully rugged language of Mr. Adams,) and thinks he can demand money from the new company for his shares, such shareholder will find himself deceived. This is quite plain and conclusive, and ought to be easily understood."

Now I will prove what I previously stated, that either the New Company must be abandoned, or the preference capital used to purchase the interest of myself and other dissidents.

On Nov. 29 I was served with the following notice:—
In the matter of the Companies Acts, 1862, and in the matter of the Cambrian Mining Company (Limited).

Take notice, that the above-named company and I, the undersigned, Thomas Adams, the liquidator thereof, do hereby, pursuant to the provisions of the above Act, and of the Companies Clauses Consolidated Act, 1845, nominate and appoint Alfred Audrey Broad, of No. 35, Walbrook, in the City of London, to be the arbitrator on behalf of each company, or me, the liquidator thereof, has arisen between you and the said company, or me, the liquidator thereof, with reference to the price to be paid for the purchase of your interest in the company. And further take notice, that I, the said Thomas Adams, do hereby request and require you within the space of fourteen days from the service hereof upon you to appoint an arbitrator for the purpose aforesaid, and that if you for the said space of fourteen days fail to appoint an arbitrator, as aforesaid, the same company and I, the said Thomas Adams, liquidator thereof, will appoint the said Alfred Audrey Broad to act as arbitrator on behalf of both parties, and thereupon the said Alfred Audrey Broad will proceed to hear and determine the matters in dispute.

Dated this 28th day of November, 1881.
THOS. ADAMS,
Liquidator of the above-named Cambrian Mining Company.

To JOSEPH FELL.
With the above before them, what can shareholders think of this "Lay on, Macduff" circular, which again puts forth the absurd false pretences that I am indebted 70,000, to the Cambrian Company for the privilege of their taking from me my mines.

I give Mr. Adams full credit for an earnest desire to extort money, but as I have said before, with scorn and contempt, I defy him. In order to prevent the shareholders from asking questions, Mr. Adams secures himself by promising to "enforce such claim as my solicitor may ultimately advise me to take." Truly Mr. Adams shows the courage of the mountebank, rather than the bravo. I would now suggest to the shareholders that they put all or any of the following questions to this disinterested Mr. Thomas Adams.

- 1.—What is the nature of this new agreement? If he does not answer this I will compel him to do so.
- 2.—What mining experience has Mr. Adams ever had (when and where) that he asked you to entrust your magnificent property to his control?
- 3.—Did he go underground at the Cambrian Mines before, or has he since had the impertinence to condemn the late operations?
- 4.—Has he not a mortgage on the mines, and is he not amply secured for every farthing expended by him?
- 5.—What is the estimated amount of his solicitor's costs up to the present time? Mr. Adams has previously assured you that 2000, should cover everything, including registration fees of the new company?
- 6.—What amount of preference capital has been allotted and paid for? At a recent meeting Mr. Adams stated the amount subscribed to be over 20,000. In a subsequent circular he placed the amount at 17,000, and in an affidavit he has sworn the amount to be 12,000. Which, if either, is correct? If neither, what is the actual amount?
- 7.—Where is the money, and in whose custody and control?
- 8.—Has any of this money been spent? If so, how much, when, and for what purpose?
- 9.—How are the current expenses being paid, by whom, and on what security?

By the time Mr. Adams has answered these questions I shall be in a position to furnish him with some further ones, and if he does not answer I shall be in a position to make him.

Mr. Adams has made a new and marvellous discovery—viz., that these circulars all cost money, and he says—"Therefore for the present I do not think it will be necessary to address you further." In one sense this must be considered a mercy, but how about "Lay on, Macduff," &c.? The true reason for his abstinence is that Mr. Adams is being found out, and he knows it.

Before concluding this somewhat lengthy circular, I cannot but express my thanks to the large number of shareholders who daily send me most flattering evidences of their appreciation of my endeavours in the cause of truth, justice, and right.

Yours ever truly,

JOSEPH FELL.

PRIZE CONUNDRUM.

P.S.—Through the courtesy of a clergyman, I am able to enclose you *fac simile* (blots, smudges, alterations, and all) of Mr. Adams's own unaided, clear, and fluent intelligence.

What does it mean?

Mining Correspondence.

BRITISH MINES.

ALSTON UNITED.—C. Irving, Dec. 8: Our lode still keeps improving in the western level, and we are getting large rocks of solid ore from the end. Our eastern end is the same as last reported—grey throughout. We shall commence sinking our shaft on the course of the lode immediately, and there is every prospect of our lode increasing in value as the shaft goes down, as it is greatly improved in the bottom of the present level.

ASHHETON.—Joseph Garland, Dec. 7: Last month, which ended on the 3rd inst., the 40, west of boundary shaft, was driven 6 fms. 4 ft.; the ground is favourable, and the ventilation somewhat impedes our progress. The lode has improved a little in appearance, and now shows a little copper and lead ores. Its width is 2 ft. The 70 west was driven 3 fms. 3 ft. 6 in.; the lode is about 2 ft. wide, and contains a sprinkling of lead ore and iron pyrites. The lode in the intermediate level, west of Milford's rise above the 60 west, is 5 ft. wide, and yields $\frac{1}{2}$ ton of lead ore to the fathom. The tribute pitches are yielding about the usual quantities of lead ore. We sold 20 tons of lead ore on the 23rd ultimo.

BEDFORD UNITED.—R. Goldsworthy, Dec. 7: North Lode: Driving in the 115 east is being carried on by the side of the lode; consequently there is nothing new to report.—Bridge Lode: No lode has been taken down in the 30 east or west since last report. In the 20 east the lode is $\frac{1}{2}$ ft. wide, with a branch of black and red oxide of ore on the footwall about 3 in. wide, but the few feet driving there have been some beautiful spots of native copper, showing the ground to be highly mineralised, and a good deposit of ore may be expected to be cut into any day. There is no other change to notice.

BELL VEAN.—Capt. Thompson: At Gobbin's shaft the bottom is still improving; granite all gone; we have now lode 7 ft. wide, composed of pryan and peach, and good for tin throughout; south wall underlying with a little. The western level at the 20 same as last.—Eastern Level: This end is still going well, the end being over 5 ft. wide at present. At Bell's shaft the men are pushing on this work, and hope to be through and the western level by next Saturday.—Stamping-Engine, Machinery, and Buildings: Engine ready for work. Machinery, four trucks come to station to-day; I will bring on 70 tons on Monday, new engine at station as well. Powder store finished, and licensed for storing explosives.

BLAEN CAELAN UNITED.—J. Pell, Dec. 9: The discovery made in the 30 is maintained, and have during the past fortnight been stripping down the south side of the slope in capital lead, which goes down. Everything is going on steadily; had our pumping-rod broken last week, but all is now going on well again, and sent a parcel of lead last Saturday.

BLEU HILLS.—S. Bennett, R. Harris, Dec. 3: The 80 east end is producing some tin stuff, but not of much value. In the 42 cross-cut north a small lode has been cut through, containing some tin stuff; we think this is the Downright lode. In the 42 east end the south part of the lode is 2 ft. wide, and worth about 40, per fathom. The 30 east end is worth 90, to 100, per fathom.

BWLCH UNITED.—Wm. Northey, Dec. 7: Last Saturday being off usual measuring and setting day, we were visited by Mr. C. C. Marvin, our director, and Master C. D. Marvin; both went underground and inspected the points now in operation, and assisted me in measuring and re-letting the following bargains:—To drive the 50 east on a branch, by four men, at 50, per fathom, to clear their own stuff; this point has a favourable appearance, and I intend to further test it. The 12 east under adit has been re-let, to four men, at 42, 12s. 6d. per fathom, and to clear their own stuff; the lode is from 2 to 3 ft. in width, containing blende, quartz, and patches of lead ore. We have from 6 to 8 fms. further driving before we reach the run of ore seen in the back of the 30. The rise in the back of the 12 west, to six men, at 50, 10s. per fathom, and for stopping out end of same 25, 15s. per fathom; the lode is from 1 to 10 ft. wide. The 10 east, to four men, at 40, 10s. per fathom, from 4 to 2 tons of lead ore per fathom. A slope and rise in back of same level, to four men, at 20, 15s. per fathom for stopping and at 20, 10s. per fathom for rising; the lode will yield about 10 cwt. of lead ore per fathom. A tribute pitch in back of the 12 west of Ritchie's shaft, has been re-let, to two men, at 70, 10s. per fathom, delivered clean in the bin; the lode is producing its usual quantity of lead ore, and the men are making fair wages.—Marvin's Lode: To drive the 15 east, at 40, 17s. per fathom; the men are to clear and select their own stuff. The lode is about 2 ft. wide, composed of killas, quartz, and small ribs of lead ore. The slope in the back of the lode, to six men, at 20, 15s. per fathom; the lode will yield about 14 cwt. of lead ore per fathom. The cross-cut south at the adit to Marvin's lode, to six men, at 50, per fathom, the men to clear their own stuff. We are continually meeting with rich branches of silver-lead ore, and I am daily expecting to cut the lode. Drawing, pumping, and crusher wheels are kept going regularly. The dressing machinery is in good order, and working well.

CARNARVON COPPER.—W. Darby, J. Roberts, Dec. 6: In the 90 east we are driving on the slide, and much water continues to flow from the end, and to-day we have a little ore showing on the side of the lode, and which we have not met taken down. In the rise in the 90 the lode continues of much the same value as reported last week; we are cutting further into the lode to prove it more fully. The western slope, between the 90 and the 90, is not looking quite so good, worth at present $\frac{1}{2}$ tons of ore per fathom. In the winze in the 80 east the lode is worth 2 tons of ore per fathom. In the new cross-cut, in the 70 fm. level (Garnon's), the ground has become a little firmer, but continues to look very kindly, and the copper is a shade better. The cross-cut in the 46 (Caey-groes) is without change to notice, except letting out a little more water.

COED-Y-FEDW AND PANT-Y-BUAITH.—R. Prince, Dec. 8: Pant-y-Buaith: The lode in the 107 driving west is 107 feet open, and we are now meeting with some lumps of splendid lead ore. Excellent progress is being made in this driving towards cutting the powerful lode ahead of us, and I expect when it is intersected to announce a discovery of considerable value and importance. I have a very high opinion of this part of our workings.

CROOK BURN.—Jacob Craig, Dec. 2: There is no change in the ends of the north and west cross-cuts this week. The engine and pumping machinery are going on regularly.

CWM DWYFOR (Brynarian Mine).—Jno. Davies, Dec. 7: I have reset the driving of Joseph level for another four days at 50, per fathom, including all cost. They have driven 3 ft. this week. I hope we shall cut the lode by the end of the month.

DERSBY MOUNTAIN.—J. Roberts, W. Sandoe, Dec. 7: At the No. 6 during the past month we have been rising from the roof towards the cross-cut from the great slope, and also stopping from the rise towards the end. The slope is really a good piece of lead ground, and had we sufficient ventilation and the ground opened, there could be no question as to making the mine to pay. We hope, however, in a month more to go a great way with this, and to make a communication and saying to the ground open, when we shall be able to resume driving the end, where there is still a good lode. Should the lode continue in the end of the same value as it has done for the last 10 fathoms driving, a fine piece of lead ground will be opened; especially so if it continue as far as the sumptuary sunk from No. 4, where there is no reason to doubt it will. In the cross-cut from the great slope at No. 5 we have about 9 ft. more to drive to reach the footwall. We have driven through some nice branches and patches of lead, and the cross-cut is now in a good kindly lode, with good lead in it. On the side of the slope we are now breaking some good lead stuff, and the slope being in a good condition for working, we are now able to make this stuff, and we are very well. We have got the crusher repaired again, and the dressing is being pushed on as fast as possible.

DENBIGHSHIRE CONSOLIDATED.—R. Prince, Dec. 8: The favourable change noted in my last report as taking place in the driving of the lode out of the 112 north cross-cut westwards continues. The forebore-to-day shows some nice spots of lead, proving, I think, that we are on the skirts of another run of ore. Both the slope in the roof of this level and that below the level are looking better for lead ore than for some time back. In the south, where the lode is 112 west, we are getting the 65 working, and very fair progress is being made through ground composed of rich clay, spar, and limestone. I strongly anticipate good and lasting results when this operation is completed.

DEVON COPPER AND BLENDE.—W. Skeels, Dec. 8: The engine-shaft is being cleared with good speed, and will be down to the 72 by the end of the present month; there is a large quantity of old timber, &c., in the shaft which must have fallen from above. The clearing of the 62 west is now 2 fms. west of Derrick's shaft; at this point we find the lode in the bottom of the level, and yield good work for copper ore, but shall be able to say more of this in next report. In the winze in the 62 the lode is 4 ft. wide, equal to 4 tons of copper and blende per fathom. The building in of No. 2 boiler will be finished by the end of next week.

DEVON FRIENDSHIP.—Charles Thomas and Son, Dec. 7: The adit end continues to look well, and yields 6 tons arsenical mundle per fm. The slopes in the back of the adit are just the same as reported last week. We have cleared the winze 18 fms. below the adit level. It will take us a fortnight to put down the skip-road to the 30 and clear the 30 level east and west. As soon as this is accomplished we shall put a part of the men to rise in the back of the 30 against the winze, and referred to above. We are making good progress with the changing house, crusher, and tramroad.

DEVON GREAT CONSOLS.—I. Richards, Dec. 8: Wheel Josiah: In the 144, east of the count-house shaft, on the new south lode, the lode is $\frac{1}{2}$ ft. wide, composed of capel, quartz, peach, and small quantities of copper and mundle ores.—Wheel Emma: Incline Shaft: In the 137 east, east of Friend's cross-cut, the lode is 5 ft. wide, composed of capel, quartz, peach, pryan, mundle, and a little copper ore.—New Shaft—New South Lode: In Jones's rise, in the back of the 145 east, we are rising by the side of the lode for more speedy progress. In the 115 east the lode is 3 ft. wide, of a very promising character, and producing some copper and mundle ores of good quality.—Railway Shaft: In Bray's cross-cut south the south part of the lode has been intersected and cut into $\frac{1}{2}$ ft., presenting a promising appearance, being composed of capel, quartz, peach, mundle, and a little good quality copper ore. In the 190 west, on the south part of the lode, the lode is 5 ft. wide, composed of capel, quartz, peach, and small quantities of copper and mundle ores. In the 175 west, on the south part of the lode, the lode is $\frac{3}{4}$ ft. wide, of a very promising character, and producing good stones of copper and mundle ores. In Denner's winze, sinking below the 175 west, on the south part of the lode, the lode is $\frac{1}{2}$ ft. wide, and worth 4 tons of copper ore and 4 tons of mundle per fathom. In the 160 west, on the south part of the lode, the lode is 5 ft. wide, composed of capel, quartz, peach, and small quantities of copper and mundle ores.—Watson's: In the 88, east of the engine-shaft, the lode is 1 ft. wide, composed of capel, quartz, peach, and a little of both copper and mundle ores. In the 58, west of the engine-shaft, the lode is 2 ft. wide, composed of capel, quartz, peach, and some copper and mundle ores of good quality.

DEVON GREAT UNITED.—Isaac Richards, Dec. 8: The lode in Willersford's shaft, sinking below the 694, is $\frac{1}{2}$ ft. wide, composed of capel, quartz, peach, mundle, and a little copper ore. In the 60, west of Willersford's shaft, on the Capel Tor lode, the lode is 3 ft. wide, and produces 1 ton of copper ore and 3 tons of mundle per fm. In the 50, west of Watson's, on the Capel Tor lode, the lode is 2 ft. wide, of a promising character, and producing some saving work of copper and mundle ores. There is no alteration to notice at any of the other points of operation since last advice.

DRAKE WALLS UNITED.—Moses Bawden, Dec. 8: We are making fair progress in driving the deep adit level west of cross-course, towards Mathew's shaft, 20 fms. of the 80 being already accomplished, and we hope to make still greater speed. By the aid of rock-drills we are driving this level at 47, 15s. per fm., the men having a contract at this price to drive to Mathew's shaft, whereas by hand labour we should have to pay 70, per fm. It must, however, be taken into account that we provide the motive power—compressed air. In the winze sinking

good washings of gold from it; and, judging from the appearance of the ground, as well as from some extensive ore workings at surface, I incline to the belief that we shall soon come upon a regular lode, and when we have come upon it my opinion is that it cannot fail to be of a productive character. At No. 4 shaft the depth is 41 ft. Here the lode is very good, and has been driven from the shaft 13 fms. 2 ft. We have this week intersected a branch of quartz running a little west of south. It is a dark, kindly looking stone. My intention is to drive on the cross-cut with all speed. No. 5 shaft is sunk 60 ft. Here we have come upon a little water, and shall now start to drive a cross-cut west to intersect the lode seen at 37 ft. depth. I am very hopeful as to finding something encouraging from the drive we are now starting. New shaft, in the centre of Nos. 3, 4, and 5 shafts, is in a north and south line with No. 2 and main pumping shafts. I am very hopeful of obtaining good results from this run of ground; in fact the discovery at No. 2 shaft speaks well for it. The discovery of quartz reported last week in bringing up a drain 24 ft. west of No. 6 or main pumping shaft, I have sunk on it during the week 14 ft., and so far it continues to be very regular and produces good looking stone. I have had several stones crushed and washed, and all of them produced a fair show of gold. I still think it is the same lode we are working on in No. 2 shaft. The health of the whole establishment is exceedingly good.

PESTARENA UNITED.—S. Gifford, Dec. 2: Pestarena District, No. 1 lode: The rise stone in back of the 33 fm. level north is yielding 3 tons of ore per fathom; worth 10 dwts. of gold per ton. The 55 north has been driven through the line of aqueous shoot, and not any of them holding down work is suspended. The 60 north continues in stiff unpromising schist. In the 100 end south the lode shows strings of ore spreading out to the right from the flat course, but has nothing defined enough to follow yet; it is yielding at present 1 ton per fathom, at 1 oz. 5 dwts. per ton. The lode in the 110 south has been richer and more regular lately, but is now fallen off a little in bottom again; it yields 4 tons per fathom, at 1 oz. 2 dwts. per ton. An intermediate drive from a slope in the back has a good lode with branches of magnetite pyrites, and this, with a slope near the end, is yielding 6 tons per fathom, at 15 dwts. per ton. The incline shaft is without change, and driving to find the lode will be started in January. The 65 fm. level, driving south on No. 2 lode, carries a good width of calcareous spar, and produces little ore.—No. 5 lode: At the winze under the 33 we have been preparing for a new sink, which is now commenced in an improved lode, there being more pyrites and an increased yield of gold, equal to 8 tons, at 11 dwts. per ton. The rise above the 65 shows no change since last report; a driving having been made for water. A rise stone in the back of the 65 has a great width of quartz yielding pyrites, and giving 8 tons, at 4 dwts. per fathom. The 90 cross-cut driving west has passed through several strings and branches of ore in regular vein rock, which are presumed to represent No. 5 lode, and driving is now commenced with a small hand of schist and pyrites quartz, and yields 5 tons of 9 dwts. per fathom. A rise stone in the back has had a most irregular branch of ore, but it is of good width now, and improves in yield; the lode at present giving 12 tons of 7 dwts. per ton. The cross-cut west from Marmos Rosso lode is in hard close-grained schistose rock. At No. 2 level south on new lode the lode thickens, but the trial made on the rock shows little gold yet. The cross-cut west from Great Quartz lode at this level holds forth in tough micaceous schist. In the No. 3 level south on slide the quartz veins lately seen have disappeared, and the end is now wholly in chloritic schist. The end on west branch carries a small hand of quartz in compact schist. At the No. 4 end north on Great Quartz lode, the ore having completed wedged out in front, the men are set stopping the back, where there is a good width of quartz, yielding 6 tons of 6 dwts. per fathom: 521 tons of ore have been reduced during the past month, and 228 ozs. 15 dwts. of bar gold produced, showing an average yield of 8 dwts. 16 $\frac{1}{2}$ grs. per ton. The steadily increasing grade of the ore is presumably due to the fact of the stopping being lately more restricted to the new and flat lodes.

AUSTRALIAN MINES.

PORT PHILLIP AND COLONIAL GOLD.—The directors have advised to Oct. 22 giving the results of the month's working ending Oct. 5. Total quartz crushed, 2505 tons; total gold obtained, 497 ozs. 16 dwts. 12 grs.; average per ton, 3 dwts. 23 grs. Receipts, including 8500, obtained from tributers, 12674, 8s. 8d.; payments, 13017, 11s. 11d.; loss, 345, 11s. 3d.; which, deducted from the previous balance, left in the hands of the directors, 6594, 10s. 11d., which was carried forward.

VICTORIA (LONDON).—The directors have advised to Oct. 24 giving the results of the working of the South Clunes Mine for the month ending Oct. 12. Total quartz crushed, 3400 tons; total gold obtained, 691 ozs. 9 dwts. Average per ton, 4 dwts. 1 gr. Receipts, 16917, 19s. 9d.; payments, 16094, 18s. 6d.; profit, 823, 3s. 3d.

ENGLISH-AUSTRALIAN GOLD.—Mr. Mark Pollard, Fryerstown, Oct. 24: We have extended the 360 ft. level south 6 ft. during the past fortnight without any change in the ground; quartz 3 ft. in thickness, and about 25 ft. in height on the lode, with two small leaders in the western wall. I have not seen any gold in breaking the quartz, but it is very good looking stone, with slate and sandstone bars. In the 320 ft. level I have commenced to rise on the lode at the end of the cross-cut; rise up 10 ft., with sandstone country on the western wall; the floor on lode 1 ft. thick, with water coming from the north end of the rise; I have no quartz in sight. In the 290 ft. level east the drive has been driven 6 ft. in the past fortnight through very hard sandstone; I think this stone is about 15 ft. thick. There is another run of slate as far as I can see by the slopes above, and there is a good flow of water still. We have extended the 240 ft. level south 9 ft. in the past fortnight; quartz very small and poor. I have also driven 12 ft. north at the same level; this end is looking better; quartz getting thicker going north, and we see a little gold in breaking it. I have also met with quartz at the 140 ft. level engine-shaft, but cannot say anything about the thickness of the stone as yet, as the men are only 3 ft. up the drive, but they have every indication of a large body of stone going down. If so I shall have to put another rise from the back of the 200 ft. level to work this stone to a better advantage than I can from this level. I have seen good gold on the eastern face of the stone, but we have not driven through it as yet. The slopes all through your mine have been very poor this month, as we have crushed 375 tons for an output of 104 ozs. of gold; yield 2 dwts. 15 $\frac{1}{2}$ grs. per ton. The reason we have not crushed any more this month is that the stone has been very hard, and the shoes very light on the stampers. I think we shall put through more this month as we have new shoes on.—Western Shaft: We have crushed 71 tons of stone—result, 7 ozs. 15 dwts.; returned gold, 2 dwts. 4 $\frac{1}{2}$ grs. per ton, which is very poor. I have removed the men on the eastern or footwall of the lode to drive north and south on that wall to prove its value. Mr. S. H. Clark, the financial agent, writes under date Oct. 15 that: "That he has had another portion of the sand or tailings analysed by Mr. Robinson Allison, who reports the sample sent has been assayed, and gives a return equal to 1 oz. 12 dwts. 16 grs. per ton, and he has therefore deemed it proper to get 5 tons treated for the satisfaction of the directors; the cost of treating it and of carting and weighing would be about 50s. per ton. He also states the poorness of the month's yield of gold is attributable to the quantity of gold worked in with the quicksilver through the copper amalgamating plates being new and fresh cleaned, and thus gathering more gold than usual until properly coated with amalgam, which would probably take four or five weeks more. A remittance of 5000, by a draft on the Bank of Victoria has been received. The working cost for the month ending Oct. 24, including about 400, expended in the Western Reef, was 4762, 8s. 9d. The gold sold returned 4067, 11s. 6d., and there are 7 $\frac{1}{2}$ ozs. of gold for sale, worth about 300. The balance in the colony on Oct. 24 was 10504, 0s. 8d.

TOLIMA MINING COMPANY.

The directors' report and balance-sheet prepared for presentation at the meeting on Dec. 20 are favourable. The Frias profit amounted to 41764, 19s.; the Alto profit to 3400, 15s. 5d. The dividends paid in August, 1880, December, 1880, and April, 1881, absorbed 68533, 19s. of the available balance, leaving 72207, 2s. 7d. to carry forward. The directors report that in submitting the balance-sheet for the financial year ended May 31, and the superintendent's report of the operations at the mine for the same period, they have little to add to the ample information they convey both as regards the work done and the results attained. Although the profits are smaller than those of the previous year, the directors think themselves warranted in believing that the position of the mine is nevertheless sounder and the prospects of the company more encouraging than at any former period. This conclusion is based on the position of the underground works, which have been so carried on as to leave a very considerable reserve of mineral, which will secure in the future a regularity of output not hitherto attainable; whilst the exploratory works have proved that the main lode both strengthens and widens as it descends, and displays in its western extension unmistakable indications of deposits underlying the old Spanish workings. The utmost attention continues to be paid to the improvement of the surface works, and every effort is made to combine economy with the efficient treatment of the mineral. In the accommodation for packing and loading the ore arrangements have been made, which materially expedite its dispatch, whilst the transport contractor who has energetically seconded the efforts of the superintendent for its speedy shipment. The works at the Sabandja Mine have not yet been sufficiently advanced to permit of more than the verification of the original estimate of the value of the lode, as will be seen from the superintendent's report. The works at the Alto Geld Mine show a profit representing a tolerable return on the capital expended on the aqueduct and works. Since the last financial year three dividends have been distributed amounting in the aggregate to 132, 6d. per share, and subject to the shareholders' approval, the directors propose to make a further distribution of profits at the rate of 5s. per share on the fully paid-up capital of the company, this present payment being in respect of the preference dividend for the half-year ended Nov. 30, 1876.

IMPROVING IRON AND STEEL.—In carrying out their invention for this purpose Messrs. LOVE and COCHRANE, of Lanchester, cause molten iron or steel to be run into moulds formed of mixtures of lime or limestone and peat, or sawdust, or dead leaves, or other carbonaceous material or mixtures of the same, whereby the molten metal is dephosphorised, and otherwise freed from impurities by the chemical affinity therefore of the constituents of the mould. The iron or steel may be run from the blast-furnace, the reverberatory, or any melting furnace into moulds formed of the combination of material above described.

below the 40, west of Mathews' shaft, the branches are producing some good work for tin. We shall by sinking this winze lay open a large extent of good tribute ground, which we expect to take away at considerable profit to the company.

DUCHY.—P. Argall, Dec. 3: The engine-shaft is now about 9 fms. below the 63, and we hope to be deep enough to commence the 80 in January next. We have passed through the lead ground in the 63, and hope soon to get into the blende producing part of the lode. The branch cut in the 80 (reported last week) has opened out to a well-defined lode fully 4 ft. wide, producing lead, blende, and sphatose ores, with at present 152 per fathom; this lode crosses our main lode almost at right angles, and from its position, and bearing is evidently the Peru lode, which proved very productive for silver-lead, a little to the north of our set. There is no notable change in the blende branch discovered in the 40 east. The rise over the 40, old sump-shaft, continues as last reported. During the last four weeks we have raised, dressed, and sent off 1015 tons of blende and 250 tons of sphatose ore.

EAST BLUE HILL.—S. Bennett, Dec. 8: In the adit end east (the 50) the lode has just been found beyond the fault, but as yet is only cut into a few inches. In the 40 east end the lode has much improved during the past week, and is now worth, according to samples already to hand, fully 302 per fathom, the lode being 2 to 2½ ft. wide, and altogether of a most promising appearance. The Pink shaft is timbered and secured on the top, but is not quite cleared through to the adit as yet, although we are daily expecting this.

EAST HERODSFOOT.—T. H. Bennett, Dec. 8: The ground in Bewe's drive is somewhat harder, but the men are making satisfactory progress, and I think as we approach the cross-course it will become easier and the lode improve; at present it is maintaining its size, but no further change calling for any remark.

EAST ROMAN GRAVELS.—Arthur Waters, Dec. 8: The 103, south of engine-shaft, is yielding stones of lead ore and blende, but not to value. We are driving this end with rock-drill. The winze below this level near the shaft—being carried 12 ft. long—is worth for that length about 6 tons of lead ore per fathom. The 97 shaft, being driven with rock-drill, is in a strong lode, worth 1 ton of lead ore per fathom. The 97 north of winze, towards shaft, is going by the side of the lode. The 38 south of cross-cut, on east part of the lode, is worth 1 ton per fathom. The two stops in this level are worth together 2 tons per fathom. The 50 cross-cut, east, towards Big Spar lode, is near the wall of said lode. This cross-cut will prove the mine a good way north of the present workings. We have to-day sold 40 tons of lead ore for 337½, and 20 tons of blende for 552. 10s., making together 452. 10s.

GAWTON.—G. Rowe, G. Rowe, jun., Dec. 3: The lode in the 117 east is improving for copper, intermixed with arsenical muffle, to the value of 207 per fathom. The lode in the 105 east is yielding 10 tons of muffle and ore per fathom. The lode in the 95 is principally composed of hard capel, spar, and muffle, intermixed with copper ore of good quality. All other points are without change, and our new arsenic works progressing very satisfactorily.

GLASGOW CARADON CONSOLS.—William Taylor, W. J. Taylor, Dec. 6: In the 114, we are pleased to say, we have cut the south lode, or a large part of it, but from the nature of the ground we think there may be still more lode south; this we shall prove on a few days only, being very anxious to open on the lode cut, which has a very fine appearance, and producing some good ore. We cannot say much about the value for a few days, having only just cut it through in the cross-course, but have no doubt when opened on will prove a profitable lode, especially going east under the more valuable part in the 102. The lode has greatly improved here compared with the 102 over this point, and being in very easy ground will admit of very rapid explorations. This is an important discovery for the future of the mine, and we hope in a short time will put us in a much better position. We have commenced to open on what we call middle lode at this level (the 114), producing good stones of ore, which we expect will improve off the cross-course. The winze in bottom of 102 south lode is worth 8½ per fathom, with a part of the lode still standing, so we shall push on this winze and get it down to the 114 as fast as possible. The 102 west on middle lode is worth 7½ per fathom. We have held the winze from the 90 to this level, making better ventilation and opening some more ground for stoping. The stones are valued from 10½ to 12½ per fathom. No change of importance to notice in the tribute pitches.

GLASGOW COPPER (Merioneth).—Capt. Rowe, Dec. 7: The stopes in the bottom end of No. 2 shaft continues to open out well for copper, and holds good the higher we go. Have re-set at 32s. 6d. the cubic fathom, allowing 15 tons to the fathom. The stopes going west in bottom of No. 1 is looking better than when we commenced. Men here now stoping down the side, at 22 per fathom. At the stopes in the bottom of shallow adit is fair copper pyrites, and we are breaking here cheaper than anywhere. The cross-cut in 5 is looking well for copper pyrites. Have taken the men from this level to stoping over the cross-cut west of No. 2 shaft. The iron pyrites lode is looking stronger for pyrites than I have before seen it. Have taken out the solar, old timber, and stuff which was in No. 2 shaft, which will enable us to stop underhand in both ends, and hope soon to get into the good ore ground which is in the stopes below. The machinery all works well now. The rollers have been replaced by new ones, and the stonebreaker has had a new fixed jaw put in. The Britten-Readwin amalgamating pans continue to work well. The carpenters have been employed recently at boarding off the amalgamating-shed from the crushing-shed; also making another percussion-table, &c. We are now making two divisions of the copper ore, instead of one as formerly, and believe it will fetch a much higher figure. We are sending the stock off to Swansea as fast as possible. Six samples of the ore sent to Swansea, assayed for copper respectively 6.11, 10.32, 13.61, 8.05, 12.80, and 6.62 per cent.

GLENROY.—R. Rowe, Dec. 7: In the shaft I have now put the men to prove the full width of the lode in the bottom; for some time we have only had a part of the lode in the sinking, the main part being on the footwall side of the shaft—a short cross-cut will prove this. In the 103 the lode is the full width of the level; there is now a leading part in the lode about 2 ft. wide, containing a mixture of blende and a small quantity of lead, but not of value. The 25 stopes is not so good, having now only a little blende in it.

GODDARD'S LEAD.—R. H. Vivian, Dec. 8: During the past week the men have been engaged stripping down the horse of ground standing between the two lodes a few fathoms west of engine-shaft, so as to carry both veins in driving eastward; by doing this, judging by appearances, we shall have a very much finer lode than we have hitherto seen. I am very much pleased with what I have seen underground to-day. I am convinced there is a good mine in store for us.

GOODEVERE.—R. Knott, Dec. 7: In sinking the shaft in the new lode we find the ground of very favourable description, and good progress is being made. No other change in our underground department calling for remark. Surface: The driving-wheel was brought on the mine last Friday, which was at once connected to the water-wheel; and unless we shall require more launders than we anticipate, I hope to bring on the water over the wheel in about a week or eight days, and every preparation shall be made so as to get the stamps at work as quickly as possible after the heads and lifters are here. The successive heavy rain of late has prevented our doing much to the dressing-floors, but this can be more fully attended to after the stamps are at work.

GORSIEDD NEW.—W. Edwards, Dec. 8: The 90 west continues to open out in a highly satisfactory manner. The lead is rising up from the bottom, and is now 3 ft. high in the forepart of the level, and worth about 30 cwt. of lead to the fathom. I am also carrying a rise up in the roof of the level, where the ground is improving, and will yield lead ore worth 20 cwt. to the fathom.—Tribute Pitches: In the roof of the 70 east No. 1 is worth 15 cwt. to the fathom; No. 2, 10 cwt.; No. 3, 9 cwt. The mine is looking better than it has done for a long time past.

GREAT EAST FOR.—Henry Cowling, Dec. 6: At a depth of 2 fms. the lode was 3 or 4 in. wide, and very good 5 fms., which point we have now reached; it has increased to 12 in., and shows signs of increasing steadily as we go further down. It is now producing splendid work for tin.

GREAT HOLWAY.—W. T. Harris, Dec. 3: Roskell's Shaft: The 110 east maintains the same character and kindly appearance as for some time past, with an increase of water issuing therefrom. In the western levels the lode is fully 5 ft. wide, and judging from its composition and the inclination of the beds we are on the eve of an important change; fair progress is being made, and the prospects very encouraging. The driving upon the north and south lode at the 90 has resulted in the extraction of some large stones of lead ore. A vugh has just been cut into in which some nice cubes of lead can be seen, and indications much in favour of an early improvement. In the 80 east the lode is 3 ft. wide, producing 15 cwt. of lead and 1½ ton of blende per fathom.—Garden Shaft: The 55 west upon the south lode is producing saving work for dressing; the ground is hard, consequently slow progress is made.—Brammock Shaft: In a pitch in the bottom of the 60 west the lode is worth 15 cwt. of lead and 1 ton of blende per fathom. The lode in the pitch in the back of this level is worth 8 cwt. of lead and 2 tons of blende per fathom.—Office Shaft: The pitch in the bottom of the 60 west has considerable improved for lead, worth fully 1 ton per fathom, and prospects most encouraging. No. 2 is producing stones of lead, and good quantities of blende.—Level Engine-Shaft: The lode in the 60 east is producing 3 tons of lead and 1 ton of blende per fathom. The winze in the bottom of this level is worth 1 ton of lead and 2 tons of blende per fathom. No. 1 in the back of this level is worth 2 tons of lead ore per fathom; No. 2, 1 ton of lead ore and 2 tons of blende per fathom; Nos. 3 to 6 are yielding 4 tons of lead ore per fathom, and appearance good. Dressing receives constant attention, and we are fast accumulating towards the next sampling.

GREAT LAXEY.—Wm. H. Rowe, Dec. 7: Until a communication is effected with Agnew's shaft, the 60 north, at Dumbell's, and the water drained to the latter point, we have thought it best to suspend for a short time the two deepest points in both mines, and there is, therefore, nothing new to report of the 259 end, north of Welsh shaft. The 247 end is now cleared of the slide, and the lode found fairly good immediately to the north of it, but the lode in the end just now is more intermixed with rock. A steady feed of water is coming from this end, which will allow of our resuming work in the sole of the 235 northward. The winze near the Welsh shaft, in the 235, not having improved we are cross-cutting in the bottom towards the west branch to prove the ground before deciding to sink further. The level is now 12 ft. deep, and the water level is to be worth 122, and 184 per fathom, and in the latter case the driving is nearing a point where the lode was much richer above. The two stopes over this level are worth 184, and 222 per fathom. A joint rise and stopes in the roof of the 220, south of the engine-shaft, is worth 252 per fathom. A stopes over the same level north is worth 154 per fathom.—Dumbell's: The lode in the 230 end north has been a little disordered in the past few days, but is now improving again, and at present worth 222 per fathom. In the 215 end north the lode north of the slide continues to be worth 352 per fathom. The new stopes in the roof is worth 252 per fathom, but richer ground in close proximity. Further south, where the level passed through a very rich branch, we are sipping the side preparatory to commencing a new winze to meet the 230 end by the time that level has advanced so far. Owing to having a considerable piece of a side branch to cut into, and take down but little has lately been done to No. 2 stopes proper, which continues to be worth 604 per fathom. There is nothing special to notice with regard to the other stopes and workings in this direction, excepting the 125, where a joint rise and stopes has considerably improved, and now worth 502 per fathom. A similar working over the 85 maintains its value—552 per fathom—and now that a driving below this level is sufficiently extended we expect a similar rich stopes there to be made in a short time. A side in the end north has been ordered and heaved the lode evidently to the west, in which direction we are now driving to overtake it. The 70 end south shows a strong lode of a rather coarse description at present, but we should not be surprised to find something of importance in this hitherto regarded as barren ground before we come to the 15 in the middle ground. We find by disking some cross-cutting is necessary in the 40 north, in order to hole to Agnew's shaft; the latter, so far as we are

concerned, having been sunk below the 37 (which is full of water) upon an eastern branch of the lode, while the 60 is upon the western one.

GREAT POLGOOTH UNITED.—Wm. Richards, Dec. 5: Since writing my last report the operations on this mine are progressing as under:—Deep Adit Level: This level is now extended 130 fms. through the old gullies of the old mine lode, and the men continue to make favourable progress. There are yet about 20 fms. further to drive to reach Highbarrow shaft, and adjacent to this shaft there is a long adit that was driven by the former workers across the whole of the lodes in the old mine, and is reported to have been driven some considerable distance on the new ground. On reaching this point it will probably enable us to examine the different lodes and lay open a number of places for operations to raise tin stuff for stamping, which of course will be taken back through the new adit which we are now making.—Great Flat Lode south of the Deep Adit Level: We are pushing on the driving of this level on the course of the lode; it is about 5 ft. wide, producing stamping work and speedy progress.—Wheeler's Lode: We have disking this level and cross-cut north of Wheeler's lode, and find that our new shaft will come down near this cross-cut.—New Shaft: This shaft is being sunk for permanent working 10 ft. long by 5 ft. wide within timber, and has now reached 10 fms. We are pushing on with this work with all possible dispatch with a pair of nine men in order to reach the adit on Wheeler's lode, so as to ventilate this level and to open up facilities for working of the same; and not only so, as soon as this shaft is holed it will enable us to extend the cross-cut north to intersect the great north elvan course and lodes in that direction at a depth of 45 fms. from surface on virgin ground; this I consider an important point.—North Shaft: We have extended the cross-cut south from this shaft 15 fms.; 7 fms. of this driving was across the elvan course, but in consequence of the ground being too hard to cross operations before reaching the lode. No. 2 Shaft: This shaft is also suspended for the purpose of having transferred the men who were working here to push on with the sinking of the new shaft. The horse-wheel is complete and in full working. We have repaired the old stamps, and having a good supply of water we shall soon have a batch of tin ready for the market. The masons are going on well with their work, and if favoured with fine weather will soon have the principal buildings completed.

GREAT RETALLACK.—T. Harris, Dec. 3: The lode in the 64 end east is a little improved for blende since last reported, as we have been meeting with good patches of it during the week in a most congenial looking ground; the lode to-day is worth 1 ton per fathom. In looking at the character and appearance of the lode, I believe we are in the neighbourhood of a good deposit of blende, and shall not be surprised if we meet with a good bunch at any time.

GREAT WEST CHIVERTON.—John Curtis, Dec. 7: In the deep adit west, on the south lode, the lode is 15 in. wide, and letting out a large quantity of water. In the deep adit west, on the north lode, the lode is 4½ ft. wide—a strong masterly lode, with stones of muffle and blende.

GUNSLAKE (Cliffers).—N. Skewin, John Skewin, Dec. 7: The lode in the 238 west is worth 104 per fathom. In looking at all the other ends and stopes are of equal value as last reported, with the exception of the 212 and 200 west, which are improving, and are now worth respectively in the 212, 122 per fathom, and in the 200, 82 per fathom.

GWYDYR AMALGAMATED.—John Roberts, Dec. 7: Clementina: In the north end at the 34 the lode continues worth fully 1 ton to the fathom. The lode in the south end is much the same as when we reported it last week; the shaft is without much change. The lode is looking a little more kindly than it was last week.—Beryl: The end at No. 2 is without any change, since we last reported it. The lode is hard, and in the 20 south we are, and very wet. The sump at this level shows at the present moment as though the lode were thrown into the hanging side, but as yet we cannot exactly say; we hope to be able to say more about it next week. The stopes by the rise from the No. 3 is looking very well for blende, and also producing fine patches of lead in the blende.

HINGTON DOWN CONSOLS.—Thos. Richards, Dec. 7: The sinking of the engine-shaft below the 12 is still progressing very satisfactorily, and the lode is producing in places rich stones of copper ore. The lode in the 12, east of shaft, is exceedingly promising, but it does not at present contain so much ore; it is, however, still full of 7 ft. wide, composed of capel, quartz, gossan, peach, priar, arsenical muffle, and some good saving work for copper ores. In the deep adit level, east of the south cross-cut, the lode is producing a little black and yellow copper ore, and is in its general character very promising. Fair progress is being made in the deep adit cross-cut, south of No. 2 lode.

KILLIFRETH.—John Mitchell, Joseph Tamblin, Dec. 8: Our sumpmen will finish cutting pit, barrow-road, &c., the beginning part of next week, when we shall begin to sink the shaft below the 30 fm. level, and also resume driving west of shaft. The lode in the 30 east is still worth 122 per fathom; this end is 3 fms. behind the winze, below the 20 fm. level, where the lode is worth 82 per fathom. We have just got through the cross-course in the 20 end east. The lode in the rise just behind this end is worth 82 per fathom. There is no alteration in the lode in the 20 or 10 end west.—Old Sump: The lode in the rise in the back of the 40 fm. level east is improving, and is now worth 104 per fathom. There is no change in the 40 end west of shaft since last report.

KIRK MICHAEL.—R. Rowe, Dec. 7: In the 30 fm. level we have begun to drive out north and south; in the former direction the lode is small, in the south end there is a good branch of lead about 4 in. wide; we shall push these drivings with all speed. There is no change to report in the 20 end east, where we are about 1½ ton to the fathom, and in the 20 south we are still going through ground, the whole of which is interspersed with lead. The lode in the roof stopes of the 20 north is not so wide going up; now about 2 ft. wide, and worth 1 ton per fathom.

KIT HILL GREAT CONSOLS.—Isaac Richards, Dec. 8: At the north engine-shaft the repairs to skip-road and other underground repairs are progressing satisfactorily. The very unfavourable weather, however, experienced during the past few days has materially interfered with our surface operations. At the tunnel level we have been working below the 20 fm. level, where the lode is worth 82 per fathom. We have just got through the cross-course in the 20 end east. The lode in the rise just behind this end is worth 82 per fathom. There is no alteration in the lode in the 20 or 10 end west.—Old Sump: The lode in the rise in the back of the 40 fm. level east is improving, and is now worth 104 per fathom. There is no change in the 40 end west of shaft since last report.

LADY BERTHA UNITED.—Thos. Gregory, Dec. 8: The lode in the 30, east of great cross-course, continues to improve, and is worth from 122 to 142 per fathom for the part carried; the remainder of the lode will be taken next week. We have cleared and resumed the drive of the 40, east of great cross-course; the lode in the end appears large, and the part carried is producing some good copper and muffle with peach, priar, and a very promising end; and as we are not far behind the 30 above, I anticipate a good lode here and at the 40 at an early date. The clearing and examining the former muffle and copper stopes, some of which promise to yield well. The men are engaged in breaking muffle and copper from 6s. to 7s. 6d. per ton of 21 cwt., including tramming and filling.

LANGFORD.—J. W. Doble, Dec. 8: I beg to forward you a short report as to the experiments carried out on the Langford burrow in bringing the same into matte or regulus. So far our experiments have been on a limited scale owing to the machinery sent in the first place being inadequate to drive the fan to obtain a sufficient blast, as strong and continuous as the ore required to properly desilverise the ore. But though our experiments have been so limited, yet the results are very satisfactory. The burrow is now producing a good quantity of matte, and the burrows on the Langford property can be treated very profitably. I hope in a few days to be in a position to carry out the experiments on a much larger scale. One great feature in favour of treating the ore from the Langford Mine is that it is very fusible, and that the gangue of the lodes in this mine set is composed of the different minerals and metallic ores to enable them to be so mixed as to render them so fusible. The produce of silver per ton of matte thrown down by the experiments already made show that with proper furnacing that there can be no doubt that the ore produced from this mine can be profitably treated, and large returns will be obtained from the burrows as soon as furnaces are erected for the treatment of the ore.

LEAD ERA.—J. A. Ede, Dec. 7: From the crossing we are driving at two points. I set the cross-cut and the driving south for the month, at 10s. per yard. In the driving and cross-cut the indications noticed in the commencement are well sustained.

LOMAX.—Wm. Argall, Dec. 7: The ground in the end is getting easier. We have several branches in the driving, and the rock now looks favourable and congenial for mineral.

MARK VALLEY.—W. George, Dec. 8: The cutting of the lode at the 160 has got down so much water that progress during the past week has been considerably impeded. We are now into it about 3½ ft.; it looks very promising, composed of quartz, muffle, and good quality copper ore. Every effort is being made, and we hope to report more fully next week. There is no alteration in any other part of the mine. We will send you a full report after our setting on Saturday.

MELANEAR.—John Gilbert, Dec. 7: The 30 cross-cut, driving south of Gundry's shaft, is now 50 fms. south of the main lode, and we are still making good progress in driving, and the ground continues very congenial for copper ore. The ground has improved for driving in the 60 cross-cut, where there are 3 or 4 fms. cross-cut from the bottom of said shaft to the lode, where some large excavations have been made by former workers, in which the stuff can be conveniently stored away instead of being drawn to the surface. This stuff will be cleared in a few days, and the shaft will be ready to receive the ladders for foot-road, after which the men will clean out the levels, so as to be enabled to examine the character of the lode, &c.

MORFA DU.—T. Mitchell, Dec. 8: We have no change in either of the points of operation here this week. The stopes are yielding much as usual. The winze

sinking in bottom of the 20 near Ida shaft continues to look very well, and yielding good bluestone.

MYNYDD GORDDU.—Thomas Kemp, Dec. 7: Bi-monthly Setting Report: The 46 end has been extended west from cross-cut in the past two months 5 fms. 3 ft. 6 in.; total distance from cross-cut, 19 fms. 5 ft. In the last 5 fms. of this extension the part of the lode carried has proved productive, varying in value from 62 to 152 per fm. The lode in the forepart to-day is showing a good appearance, being composed of killas and spar, carrying lead ore worth 202 per fm.; from every appearance we are opening out good stoping ground here; this bargain is re-set to six men, at 160s. per fm., at 6 fms., to end of setting. The 46 end, east of cross-cut, has been further driven during the past two months 2 fms. 1 ft.; total distance from cross-cut, 6 fms. The part of the lode carried by this drive is of the same composition as for some time past, principally calc spar, intermixed with muffle, at times showing spots of ore; this bargain is re-set to two men, at 150s. per fm., at 3 fms. The winze sinking under the 34 has been further deepened in the past two months 4 fms. 1 ft.; total depth, 11 fms. 4 ft. The lode in the bottom of winze is composed of killas and spar, showing a little ore. I very much regret to say that owing to the great influx of water we are compelled to suspend sinking until such time as the 46 end west is sufficiently advanced to drain same. Six men to stopes under the 34 on north part of lode, at 140s. per fm.; lode worth 152 per fm. Six men to stopes under the 34 on main part of lode, at 110s. per fm.; worth 252 per fm. The 12 end, west of shaft, has been further extended in the past two months 2 fms. 10 in. The part of the lode opened on in driving has a very strong and masterly appearance, chiefly composed of spar, intermixed with killas, at times showing a little ore; this bargain is re-set to two men, at 155s. per fm. A tribute pitch over the 12, east of cross-cut, to four men, at 140s. per fm., the ore to be made marketable; worth 7½ per fm. The parcel of silver-lead ore, (15 tons) was forwarded to Messrs. Goodhart and Co. yesterday (Tuesday). Hauling and dressing going on as fast as possible. Machinery in excellent working order.

NEW GREAT WHEAL VOR.—Henry Cowling, Dec. 6: We are timbering and securing shaft No. 2, and making it convenient for drawing the stuff by horse-power. I hope to complete this work by the end of the week. The lode continues to grow stronger and richer the deeper we go down. It is a splendid tin lode, and I have never seen anything like it before. The company has decided to erect complete machinery for stamping, winding, and drawing water for dressing purposes. When this machinery gets fairly to work we shall make wonderful returns.

NEW HOLMBUSH.—H. Bennett, Dec. 7: We have cleared and secured the 120, west of the cross-course on the Flap-jack, as far west as the present end, and have put in the tramroad. We have set the end to a full pair of six men to drive west to intersect the lead lode, which we expect to do in about 15 fms. driving. We have six men clearing the 110, on the Flap-jack lode to the Ladder Road winze, to the 120, four men clearing the top 100, west towards the cross-course. Fair progress is being made in clearing both these levels, and, when cleared, we expect to meet with some good paying ground. A winze to sink below the 70, west of cross-cut on the Flap-jack lode, by four men; lode yielding rich arsenical muffle with stones of copper ore. The 70, to drive east and west of Miners' rise, east of Wall's shaft on the Holmbush lode, by six men; lode producing good arsenical muffle. The 70, to drive west of Dinner's rise, west of Bray's shaft on the Holmbush lode, by two men; lode producing arsenical muffle of good quality.—Stoping: A stopes in the back of the 120, on the Flap-jack lode, by four men; the lode producing arsenical muffle of good quality and good stones of copper ore. Two stopes in the bottom of the 110, on the Flap-jack lode, by 16 men; lode large, and yielding rich arsenical muffle, a portion of which we are selecting to sell as copper ore after the arsenic is extracted from it. Two stopes in the back of the bottom 100, on the Flap-jack lode, by eight men; lode producing good quality arsenical muffle and copper ore. A stopes in the back of the top 100, on the Flap-jack lode, by eight men; the lode is producing a large quantity of arsenical muffle, with a good branch of copper ore on the footwall. A stopes in the back of the 30, on the Flap-jack lode, by two men; lode yielding rich arsenical muffle. A stopes in the back of the 100, on the Holmbush lode west of Wall's shaft, by two men; lode producing good arsenical muffle of superior quality. Five stopes in the back of the 80, on the Holmbush lode, by 20 men; lode yielding arsenical muffle of good quality, with a little copper ore. A stopes in the back of the 60, west of Wall's shaft, by four men; the lode is producing good arsenical muffle with a little copper ore. A stopes in the back of the 60, west of Bray's shaft, by four men; lode producing very rich arsenical muffle. Five stopes at the 40 working by 16 men; lode yielding good arsenical muffle. A stopes in the back of the 40, west of Wall's shaft, by two men; lode yielding good arsenical muffle with a little copper ore. A stopes in the back of the 35, east of Bray's shaft, by two men; lode producing arsenical muffle of average quality. We have commenced to enlarge the arsenical shaft, at the engine-shaft on the Flap-jack lode, for the purpose of putting in a double skip-road. Our intention is to make this underlay shaft sufficiently large for a double skip-road and a line of rods from the 90 to the 175, which is the present bottom of the mine, and then this shaft will be continued in depth on the course of the lode, thus dispensing with the necessity of further sinking the perpendicular shaft and the driving of long and expensive cross-cuts in order to reach the lode. We have men engaged in fixing the air-pipes for the Darlington rock-drills to drive the 70, east and west on the Flap-jack lode.

NEW KILTY.—W. Vivian, Dec. 8: We are making good progress in sinking the engine-shaft below the 24. In the 24, driving east, the lode has very much improved in size and appearance; I am looking to a still further improvement at this point.

NEW WEST CARADON.—N. Richards, Dec. 7: In the 38 cross-cut, driving south of Hallett's shaft, we have intersected another kindly looking branch about 5 in. wide, composed principally of quartz and yellow copper ore. We shall not say, however, to open on this for the present, but push on the cross-cut to reach the lode referred to last week. There is no other change to notice. All points maintain the same value and promising appearance as stated in my last.

NEW WEST GOGINAN.—Abasalom Francis, Dec. 8: Since my report which appeared on Dec. 3 we have been putting in some strong planks and strengthening Poulter's shaft from the lobby or adit to surface, and have made all firm and secure. Our sinking has proceeded steadily without any let or hindrance, all the machinery working splendidly. We are daily expecting to get on the solid rock so as to fix a strong and substantial frame on it. What we are now passing through is the back, or what is termed in Cornwall the "spec" of the lode, being upheaved from it, which is often the case with large lodes. This "spec" is a decomposed yellow rock, in which we yesterday found a splendid stone of silver-lead ore, gossan, quartz, and carbonate of lime. A finer lode-stone I never saw, and there does not exist a doubt in my mind that we are now on the very track of the Goginan main lode, and that we shall soon open out a very rich and lasting mine, and that the shareholders will be very richly rewarded for their money invested in it.

NORTHERN HEAD.—T. Tonkin, Dec. 8: The tribute stopes in the adit level yield 9 cwt. of ore per fathom in moderately easy ground. The 15 tribute ground, east section, yields 9 cwt., and the west section yields 10 cwt. to the fathom. The 42, above the 42, west section, yields 18 cwt. of ore to the fathom, and the east section stops 8 cwt. to the fathom. The stopes near Low shaft yield 7 cwt. to the fathom. The weather is very favourable for dressing operations.—Brandon Walls: The water is now out of the mine, and the shafts and levels are being rapidly repaired. We shall shortly be in a position to open on the lode in two or three places.

NORTH D'ERESBY.—R. H. Vivian, Dec. 8: We are driving on the hanging side of the lode from the cross-cut, which has been driven from the bottom of the shaft; if anything, it has improved in value since last week. We are daily opening out on a very fine lode, which will speak for itself. I am also selecting some of the best ore in a pile by itself.

NORTH GREEN HURTH.—Jas. Polglase, Dec. 1: We have intersected another spar branch in the deep adit cross-cut, the ground being much the same. The shallow cross-cut is rather harder, consequently our progress is not quite so rapid.

NORTH HERODSFOOT.—T. Trelease, Dec. 8: Our shaftmen are now engaged clearing the 117, which is crushed very badly at the point we have now reached, in consequence of which our progress is rather slow, but we hope we shall find it in better condition again soon as we get further north. The lode in the 80 end is still small, but the strata around it are more freely intermixed with sphatose iron and muffle, which I think are evidences of our getting into a more productive channel of ground. The back stopes in this level is yielding 5 cwt. of ore per fm., and the bottom 8 cwt. The lode in the 50 end has improved in appearance and character, being composed of a friable quartz, sphatose iron, and muffle, intermixed with good stones of lead ore. There is no other change worthy of notice during the past week.

NORTH WALES FRESH OLD COPPER MINES AND SMELTING.—H. B. Vence, D. Douglas, Dec. 7: The engine-shaft men are now engaged sinking the shaft below the 30. There is no material alteration in the ground, but as we get deeper additional feeders of water are being tapped, and which I hope will so drain the lode in the 30 as to expedite the drive both north and south. In the 30, driving north of engine-shaft, the part of the lode being taken in the level is about 5 ft. wide, composed of quartz and capel, spotted throughout with copper; an improvement in this end is imminent as we near the perpendicular of No. 2 sump. In the 30, south of engine-shaft, the lode is of just the same character and composition as in the 30 north. In No. 2 sump, sinking below the 20, the lode is about 5 ft. wide, with a mixture of copper throughout, but not so rich as it has been. This change we only look on as temporary, as the lode has been all the way through occasionally poorer floors, and then an improvement, and sometime the change has more than compensated for the temporary falling off, as it has proved increasingly rich below. In the 20, driving south of No. 1 sump, the lode looks more promising, and contains more copper than at any time during the last two months. A continued improvement would be of great importance to the future of the mine, as the ground is all unwrought in this direction. We have sent out samples of 20 tons of copper ore of very rich quality, and expect offers in by the end of this week.

OKEL TOR.—H. Bulford, J. Roda, Dec. 8: All points underground same as last report. Progress in the new shaft has been retarded by the heavy rainfalls, causing an increase of water. We have attached hauling gear to the engine at the shaft, with a view to haul as well as pump. We expect to start the stamps next week.

PANDORA.—H. Nottingham, Dec. 8: Engine-Shaft: We are making fair progress at present in sinking below the 45; the lode has a strong appearance, and bearing a good deal of limestone, intermixed with blende, but showing lead to value. I think the best part of the lode has gone down to the foot-wall; we shall soon prove this when deep enough for another level by a cross-cut through the lode. The 45 end, driving south, has rather improved; we are still driving in a wide, strong lode, producing 1½ ton of lead to a fathom, with a good deal of blende. Two stopes working in back of this level are worth together 2½ tons of lead and same of blende to a fathom. The two stopes working over the 33, south of shaft, are worth 1½ ton of lead and 2 tons of blende to a fathom.—Surface: We are making good progress on the dressing-floors, considering the very stormy weather we have had. Our reservoirs are all full, and running over. I sent out samples for 25 tons of lead and 40 tons of blende on the 26th inst. **PARYS.**—T. Mitchell, Dec. 8: The 90, west of cross-cut on the No. 2 lode, continues to look well, and will yield 6 tons of copper ore per fathom. The last 3 fms. driven turned out nearly 15 tons of good ore. The ground looks very promising, and we hope to open up some good ore ground here. In driving north-west from this place the ground also looks kindly, and is producing a little ore. The No. 1 west of cross-cut continues about the same value as given in my last report—1 ton of copper ore and 1 ton of sulphur per fathom. The 90 east of cross-course, on the Carreg-y-doll lode, has further improved this week, and will yield as present about 2 tons of copper ore per fathom; this is also a promising

all possible dispatch. The adit level north of cross-cut in graphite is let to six men for 10 fms., at 34, 15s. per fathom, takers to remove their stuff and pay costs. The lode produces the usual amount of mineral, and all the footwall

fulfillment of the constant predictions of an old correspondent as of the rise in metals, and to his present opinion as to the probability of a still further considerable advance within the next few weeks. During the past few days there has been this further rise to the extent of about 3*l*. in copper and 4*l*. in tin, and he now writes that, from all the information he can gather, he would not be surprised to see a further rise of 15*l*. to 20*l*. per ton in tin and 20*l*. in copper and, probably, of from 3*l*. to 4*l*. per ton in lead during the next few

months. of that tin and time will business to be history infarscarily doubted, able, and Devo quoted of copper in driving to press mundic this me Drak with the extent away : genera held on was du South 35 to 4 the me better mine w Phon and it change London. Whe 617. 17 night the sa Dec. 2 pointe Kit little c sign-e are pre ever, e with t fairly total l Devo of Wi copper son's, saving sidered Mon ters p raising Bed Bridge provce 180 fm. here a section satisf West tin, w drive to 12 fms. port l Mon this m be seen being v The from t us to 124 m Octob Octob incur made prop Ric Eureka of ore value that the 30 east dr 1000 r level, 30 ft. some o product Ru the cl of the bullic and it in the below points ing the captain Eur in the Mine now v pushe level, burg Col that lowin John H. B lode, is bei making Isa with early Yu state since figure grave that t The g 70 yar wide, yards, about of val cubic e allo pear t imme He A.R.S his ro 23 t Lisbo tracto air-co chine cylind diam

months. He further remarks that the fact should not be lost sight of that copper was once selling at double the present price, and that tin and lead were also proportionately higher, and that, too, at a time when the trade of this country and of those with which we do business was not nearly so prosperous as at present. It is cordially to be hoped that the opinion is not over-sanguine, as more satisfactory information for shareholders in copper, tin, and lead mines could scarcely be wished for. In support of these views there is the undoubted fact that the home consumption now going on is considerable, and the demand for exportation very large.

Devon Great Consols shares are gradually advancing, and are now quoted at about 8½ to 9½, owing to the important rise in the price of copper going on, as well as to the improved prospects of the mines in driving east and west on the new south lode, where, according to present indications, some good discoveries of copper ores and mounds (arsenic) are confidently expected. The sale of copper ore this month will be about 950 tons.

Drake Walls United, ½ to 1; satisfactory progress is being made with the driving of the deep adit level to Mathews shaft, and a large extent of good tribute ground is being laid open, which will be taken away at considerable profit to the company. An extraordinary general meeting to confirm a special resolution passed at a meeting held on Nov. 24 took place on Friday, when the special resolution was duly confirmed.

South Caradon shares have had a serious fall, being now quoted 35 to 45, owing, it is said, to the last report of the agent made to the meeting of shareholders, but it is hoped and believed that with better prices for ores and some good discoveries this wonderful old mine will again see better days.

Phoenix United shares are quoted 2½ to 3, sellers preponderating; and it is stated that with the exception of a few shares having changed hands at about 2½ to 3 there is very little doing either in London or Cornish share markets.

Wheal Jane, 1½ to 1½; have sold about 7½ tons of black tin, at 61½, 17s. 6d. per ton, realising 459½, 2s. 7d., the production of a fortnight only. One of the calciners was idle over one week, otherwise the sale would have been more. The meeting will be held on Dec. 20, for which a full report will be presented by the newly appointed manager.

Kit Hill Great Consols, ½ to 1; the recent gales have caused some little delay. The agent (Dec. 8) reports that at that the north engine-shaft the repairs to skip-road and other underground repairs are progressing satisfactorily. The very unfavourable weather, however, experienced during the past few days has materially interfered with the surface operations. At the tunnel level they are getting on fairly well, having driven during the past month 6 fms., making the total length 32 fms. 2 ft. 9 in.

Devon Great United, 1 to 1½; the Capel Tor lode, in the 60, west of Willesford's, is reported to be 3 ft. wide, and produces 1 ton of copper ore and 3 tons of mounds per fathom. The 50, west of Watson's, on the same lode, is of a promising character, and producing saving work for copper and mounds ores. The prospects are considered to be highly encouraging.

Mona, 8 to 9; there is no change reported from the mine, all matters progressing in a satisfactory manner. It is estimated that the raisings of copper ore for the month will amount to 400 tons.

Bedford United, 1½ to 2; the stuff coming from the 20 east, on the Bridge lode, contains, it is said, some beautiful ore, and a great improvement in that direction is imminent.

Marke Valley, 1½ to 1½; it is reported that the lode has been cut into in the 160 fm. level cross-cut 3½ ft. There is said to be every indication of finding here a large productive lode. Much water is being let down from this intersection; hence the progress is slow, but appearances are reported to be highly satisfactory.

West Godolphin, 2½ to 2½; the 50 west is reported still in a good course of tin, with every prospect of its continuance. The 60 fm. level has been set to drive to cave underneath this run of tin ground. It is calculated from 9 to 12 fms. will reach this important point. All other parts of the mine are reported to be opening up profitable stopping ground.

Mona Consols, 1½ to 1½; it is reported that great progress has been made at this mine during the last few weeks. Large bunches of copper ore are now to be seen at the 10 fm. level, with every prospect of a continuance, the district being very rich in minerals.

The Asia Minor Company have received a highly satisfactory report from their manager, dated Nov. 5, but pressure on our space compels us to defer its publication until next week. On Oct. 31 there were 124 men employed, against 63 on Sept. 30. The production during October was more than double that of the preceding month, and the October ores will at least cover all expenses (including buildings, &c.) incurred during the month. Several important discoveries have been made and there is everything to indicate that when developed the property will yield large profits to the shareholders.

Richmond, 16 to 16½; the usual telegram from the mines at Eureka, Nevada, states that the week's run was \$40,000 from 757 tons of ore. During the week the refinery produced 606 bars to the value of \$10,000. The assistant superintendent (Nov. 16) reports that the north drift, 300 level, has been run 19 ft. along fissure in limestone; ground looks favourable for ore. The west drift from the bottom of the 30 ft. winze, below the 600 level, has been run 13 ft. in low grade ore. The east drift from the bottom of the 50 ft. winze, below the 600 level, has been run 16 ft. in ore of a fair quality. The north drift, 700 level, under No. 13 chute has been run 13 ft. in limestone—looks well for ore. The south rise from the 200 level, near shaft, has been extended 8 ft. in broken ground and small caves; some ore. The rise from the 600, 62 ft. east of fissure drift, has been extended 30 ft. through ledge matter, and looks favourable for ore. The ore chambers are producing the usual amount of ore, and are holding out well.

Ruby and Dunderberg, ½ to 1; the telegram this week advising the closing down of the furnace for a short period, states the result of the week's run to be \$9000, from 138 tons ore, producing 32 tons bullion. This gives the unusually high average of \$65 per ton of ore, and it is evidently rich in lead. The usual mine report advises that in the Dunderberg Mine, while the 700 ft. is not looking so well, the winze below the 600 ft. level is down 10 ft. in good ore about 2½ ft. wide. At other points the features are favourable. At the Bullwhacker the stopes were producing the usual quantity of ore. The quality had considerably improved, and the captain "reports it to be the best ore ever taken from the mines."

Eureka (Nevada), ½ to ½; it is reported that owing to a breakage in the steam-pumping gear work was suspended on the Bald Eagle Mine for four days. This has been repaired, and the machinery is now in proper working order again. The various levels have been pushed forward without any great change, and the bottom, or 300 ft. level, is to be at once worked on. The shipments from the Williamsburg were 14 tons of good ore.

Colorado United, 2½ to 2½; the New York Mining Record states that United States Government patents have been issued for the following mines, the property of this company:—Elephant lode, Johnson lode, Champion lode, Columbus lode, Investigator lode, W. H. Brown lode, Argentine lode, Chelsea Beach lode, and Thunderbolt lode. The Leadville Mining Index of Nov. 5 says—"A double track is being laid in the Union Tunnel, near Brownville, and the mine is making other preparations for increasing its output."

Isabelle, ½ to ½; it is reported that operations are being carried on with vigour, and that shipments of bullion will, probably, commence early in January.

Yuba River, par to ½ prem.; in confirmation of the favourable statement which he made at the statutory meeting some six weeks since, Mr. Edward Davies, of Dolcaradog, this week furnishes the figures upon which he based his opinion. He valued the auriferous gravel on the company's property at 20,000,000, and now declares that this was no random guess, but was based upon measurement and figures. The gravel is in some places, he says, 400 ft. thick, but to be safe he takes it at 70 yards, or about half this. Then, as the estate is 3520 yards long and 880 yards wide, the quantity of auriferous gravel to be wrought would be 216,832,000 cubic yards. He found that the average of three assays of the gravel gave 6 ozs., or about 207, per ton. The cubic yard weighs about 2 tons, and Mr. Davies, instead of valuing it at 407, as shown by the above assay, takes it to be worth but 2s. per cubic yard, yet still obtains 21,683,200, as the gross value. That an ample margin is allowed will be admitted, and if the data be accurate the company would appear to have a large property. It is anticipated that washing will be commenced immediately, as heavy rains are reported.

Hornachos, 10 to 10½; it is stated that Mr. Hilary Bauerman, A.R.S.M., is now engaged inspecting this company's mines, and that his report may soon be expected. Advances have been received of 23½ tons of dressed silver-lead ore which are awaiting shipment at Lisbon. During November 650 tons of high class mineral were extracted, which are now being got ready for market. Two pairs of air-compressing engines have been ordered for rock-drilling machinery, one for each mine. These engines have each two steam cylinders of 17-in. diameter, and two air cylinders of the same diameter.

Eberhardt, ½ to ½; the report of Captain Drake, dated Nov. 10, was forwarded to the shareholders this evening. After detailing the various points of operation he states that their working force is 23 men and two mules. "With the supplies at the tunnel, and wood at the W. P. Waterworks for pumping our water supply, everything connected with the machinery and equipments of the tunnel and works is in condition for continued steady running. The contracts for wood, both for the tunnel and waterworks, are well advanced, and will be completed about the middle of December. Although we are not in bonanza, the showing of quartz and ore that we have in the 2000 ft. workings is sufficient to encourage us in the belief that we shall, in the near future, open into a body of ore that will in a short time reward our shareholders for their patient waiting, and repay the large expenditure of money incurred in our long struggle."

Kapanga, ½ to ½; there is reported to have been a considerable business on these shares during the week, and the price remains firm.

Michipicoten, 1½ to 1½; a very cheering report from the manager will be found in another column.

Sentein, ½ to ½; it is reported that in one portion of the workings they put two men to cut into the south or foot capel left standing by the former workers, and have unexpectedly struck into very rich ore ground, worth 20 per cent. for lead, and 30 per cent. for blende, from which they had already broken 40 to 50 tons, and from all appearances they will be able to extract enormous quantities of this quality ore from this point alone. A further discovery of lead has also been made on the deepest level. All the stopes have considerably improved, being worth in some places from 8 to 10 tons of ore per fathom, and the raisings for November they estimated would reach 1000 tons of ore.

For Lead Mine shares there has been a little more enquiry, but the amount of business doing is still limited, and prices remain without change. Roman Gravels are reported to have been in good demand this week at 11½ to 11½ ex the dividend of 5s. per share. The mines continue to look well, especially in the several levels driving south. The sale of 150 tons of lead ore the middle of November realised 1452½, 10s., and a further sale of 200 tons this week realised 1935½, or together 3387½, 10s., leaving a good profit for the shareholders. It may be observed that with only a moderate rise of some 3½ per cent. in the price of lead ore, and which may be expected at no very distant period, would make an important addition to the company's monthly profits, selling, as is now being done, such an increased quantity of ores. This mine has now paid in dividends to the present company 105,500, and may now be considered one of if not the richest lead-producing mine in this country.

Van, 8½ to 9; the monthly report is considered satisfactory. It is gratifying to know that while the 120 west continues good the 15 east shows signs of a speedy improvement. The sale on Thursday, 200 tons lead and 200 tons blende, realised 2740.

Frongoch, 3 to 4; a parcel of 100 tons of blende has been sampled for sale on Wednesday next. It is stated that during the current year no less than 2500 tons of ore have been raised and sold from this mine, and that several hundred tons additional will be sent to market before the close of the financial year. The latest reports from the mine continue satisfactory, and all points are stated to be opening out as well as ever.

Goginan, 1½ to 1½; the new rock drilling machinery is stated to be ready to go to work, and is expected to be started forthwith. It is said that the new discoveries fully maintain their value, and further improvements are expected. Some fine samples of rich silver-lead ore have this week been received in London.

Ystwith, ½ to 1; the new lode is to be proved by driving on its course, as soon as the cross-cut is sufficiently advanced, and hopes are expressed that the ore bearing part will be soon discovered. The lode, so far as seen, is upwards of 6 feet wide, and of a masterly character.

Grogwinion, 2 to 3; the latest news is to the effect that the lode in the shaft below the deep adit shows an improvement.

Bwlch are quoted 3 to 3½, but the price appears to be quite nominal, as holders complain that no buyers at anything near it can be found. Mr. Marvin writes that the rise in the back of the 12 west, under adit, is opening out good stopping ground, the lode being from 6 to 10 ft. wide, producing from 1½ to 2 tons of silver-lead ore per fathom, and this in whole ground for 35 fathoms. The mines, he adds, continue to look well.

Referring to West Pateley Bridge, a correspondent writes that an encouraging feature has at length been developed in this mine, a feature in every respect identical with that which led to the discovery which made this for some time one of the most promising of our home lead mines. Shareholders will recollect that a small leader was first met with which opened into the valuable course of ore, and that the productive value of lead ore per fathom for no less a length than 70 fathoms. For some considerable distance this great deposit has been "nipped." The manager this week states that "he is pleased to announce that the ground in the 56 north-west has again considerably improved, being fully 18 in. wide, intermixed throughout with lead ore, presenting on the whole a more promising appearance than anything that has been seen here for some time past. The vein at this point is untouched to surface. The cross-cut north from the 20, east of No. 2 shaft, is in 14 fathoms. Fliers are being continually met with containing rich spots of ore, leading him to anticipate a rich lode in advance."

As to Quartz Hill Stock Exchange Settlement, the secretary, in reply to a shareholder, writes that, up to the present time, we have had no intimation from the committee of any impediments. All I know in this matter is, that the application for a settlement has been made in the proper papers and books lodged with the secretary of the Share and Loan department of the Stock Exchange, and that it has been acknowledged in shape, of being informed that we shall be sent for when required by the committee. This will, I imagine, take place in due course.

The gross actual traffic receipts of the New York, Pennsylvania, and Ohio Railroad Company for October were \$475,043, against \$503,824 last year. The net earnings, after deducting all charges, rents, &c., amount to \$54,515, against \$123,402, showing a decrease of \$68,887.

GAS SHARES.—The principal business in these shares, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, has been—British, 35; Commercial, 185; Continental Union (Limited), 26½ to 27½; ditto, ditto, New (1869-72), 18½ to 18½; ditto, ditto, 7 per cent. pref., 26; European (Limited), 19½ to 20½; ditto, New, 9 to 9½; Gas Light and Coke (A ordinary), 173 to 174; ditto, C, 10 per cent. pref., 216½; ditto, D, 10 per cent. pref., 216½ to 217; ditto, H, 7 per cent. maximum, 130½; Imperial Continental, 184 to 185½; London, 202½; Monte Video (Limited), 14½ to 15½; Rio de Janeiro (Limited), 24½ to 24½; San Paulo, 14 to 14½; South Metropolitan, A, 177½. Gas stocks steady. For closing prices see list on the last page of Journal.

INSURANCE SHARES have, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, been dealt in as follows:—Alliance British and Foreign, 32½; City of London Fire (Limited), 19½; City of London Marine Corporation (Limited), 11½ to 12; Fire Insurance Association (Limited), 4½ to 4½; Guardian, 73½ to 74; London and Provincial Law, 8; Law Fire, 16½; London and Staffordshire Fire, ¾; Marine (Limited), 26 to 26½; Merchants' Marine (Limited), 1½ to 1½; Ocean Marine, 9; Universal Marine, 8½ to 8½. Insurance firm. For closing prices see list on the last page of Journal.

TRAMWAYS.—The closing prices of this evening, as quoted by Mr. W. Abbott, of Tokenhouse-yard, are given in tabular form in the last page of Journal.

RAILWAY AND GENERAL MARKETS.—Referring to the course of business done to-day during official hours (11 to 3) Mr. Ferdinand R. Kirk, 5, Birch-lane, writes:—"Opening: Business is seriously curtailed by a fog more dense than any this year, and prices have given way. Spanish, that closed yesterday at 31½, are only 31½. Unified and Turkish Fives are each ¼ lower. Peru 5 per cent., 15½ to 16; 6 per cent., 20½ to 21; North-Eastern, 172½ to 173½; Great Western, 136½ to 138½. A brisk demand exists for mining shares, but prices are still far below the level justified by the metal markets. Wheel Orebars have steadily advanced to 3½ 4½; the shares are very scarce, and look like going much higher. Parys Corporation, ¾ to ¾; East Blue Hills, ¾ to ¾. Grogwinion are in demand at 1½ to 1½. South Caradon, 32½ to 37½; Rio Tinto, 29½ to 30; Van, 7½ to 8½; Devon Consols, 7 to 8; Emma, 2½ to 2½. Closing: Spanish and Unified are ¼ better. Turks, ¾. There is considerable strength in the railway market. North-Eastern have reached 173½, and Caledonian, 110. British fluctuate between 98 and 95½."

BRATSK.—The monthly report of the managers, received this week, is again most favourable. The profit for November will be 5000, this being the first month of the company's possession of the property, and before any of the new machinery is erected. There can be no doubt but that when in full operation the profits of this undertaking will be very large.

GREAT HOLWAY.—We are informed that the sales of lead and blende for December month will exceed the returns for November by some few hundred pounds. The 60 level maintains its splendid production, whilst the 80 is now close to the same run of ore. Should this ore body be found as productive as in the upper levels the reserves of lead may be valued at thousands of pounds. The 110 west is undergoing a great change and it is expected that one of the Victoria runs of ore is in proximity, so a great discovery is looked for. With an improving price for lead the public will no doubt be eagerly seeking the shares at present low prices, for undoubtedly the company possesses a splendid property. A new feature this week is a discovery of ore on the company's freehold worth 1 ton of lead per fathom and likely to prove of great importance.

COED-Y-FEDU AND PANTYBUARTH.—The 107 level at Pantybuarth is nearing Rowland's cross-course, and practical authorities look for a great deposit of lead. This is one of the many lead mines not noticed by the investing public, but destined to create a stir in the near future.

PRINCE OF WALES.—This mine looks well and the knowing ones are quickly absorbing the shares at present low quotations.

WEST HOLWAY.—The cross-cut from Ram shaft is now close to

the lode, and as this same run yielded such an enormous quantity of lead in adjacent mines its intersection at West Holway is watched with keen interest. Other parts of the mine look well and it seems now an established fact that the deeper the shaft is sunk the more valuable do the lodes become.

VAN CONSOLS AND GLYN MINE.—Our readers will perceive in the usual fortnightly report that some very important discoveries have been made at this mine within the last 10 days. For the sake of the mining industry in the neighbourhood of Llanidloes, which latterly has been somewhat under a cloud, as well as for the shareholders of this mine, we hope these improvements will continue, and if they do, we need scarcely point out that this will at once become one of the most valuable properties in the Montgomeryshire district. No doubt we shall hear more of this, and that independent inspections will be made by those who take an interest in the property. The 50, west of Gundry's, according to the report to-day, is becoming of great interest. Should the anticipated body of ore be met with there we shall have a second Van.

FRONGOCH has sampled 100 tons of blende for sale on the 14th inst., and further parcels of 100 tons of lead and 150 tons of blende are in course of preparation for market. The total sales this year have so far been 2600 tons of ore.

PRINCE OF WALES SLATE.—The following further telegram has been received: "Prince of Wales Quarry: Rock in western level continues to improve. Just cut a slant with about 1 in. of clay in it." In the Festiniog district the clay slant is a sure indication that the "Old vein" on which the Palmerston and other large quarries are worked is immediately below.

SMOKE ABATEMENT EXHIBITION—SOUTH KENSINGTON.—The committee announce that the new inventions, not patented, exhibited at this exhibition are protected by special provisions of the Board of Trade. They also state that inventors having apparatus, of which models cannot be prepared in time for exhibition, may send in drawings of the same.

MESSERS. PIXLEY AND ABELL.—GOLD: Has been in fair demand during the week; the arrivals have, however, been so small that recourse has been had to the Bank to the extent of 65,000. The withdrawals, which have been all in sovereigns, have been for Egypt, Buenos Ayres, and the West Indies. The Elbe has brought 4,300, from Buenos Ayres, and this is the only arrival. The Para has taken 17,000, to the West Indies; the P. and O. steamer 25,000, to Alexandria; and the Humbler 5,000, to the Brazil. SILVER: The market remained steady at 51½, to 51½, per oz., until yesterday, when an order for the Mint caused a slight rise to 52½, per oz. The arrivals consist of 12,000, and 21,760, both from New York. The P. and O. steamer takes 20,000, to Bombay.

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ORES AND ASHES, SALTS, PHOSPHATES, &c.

MR. THOMAS EARLY has removed to 110, CANNON STREET,

LONDON, E.C., where all letters must be addressed.

MR. EARLY strongly advises the PURCHASE OF SHARES IN MINES in the ST. AGNES DISTRICT.

WHEAL COIT.—This mine conducted on the Cost-book system (Act 1869) adjoins WEST KITT. The latter is now well-known. The former are long well in equal favour. The offices of the company are as above.

WEST KITT shares, which Mr. Early recommended at £2½, are now at £3½ to £4½, and will probably go cent. per cent. higher.

References exchanged if necessary. Business done at net prices. No fees.

MR. W. B. COBB, STOCK AND SHARE DEALER,

29, BISHOPSGATE-STREET, LONDON, E.C.

Corporation of South Australian Copper Mines, and Columbian Hydraulic Shares, should be bought at once.

A few copies left of December Circular.

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Deals in all descriptions of STOCKS and SHARES at close market prices. He strongly recommends the immediate purchase of GOLD HILL Mine Shares and BRAZILIAN GOLD Mine Shares, which are safe to have a great rise. Full information on application personally or by letter.

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JOSEPH TOMS, STOCK AND SHARE DEALER,

No. 88, BISHOPSGATE STREET WITHIN, E.C. has FOR SALE—

100 Prince of Wales, 14s 9 100 Altamir 7 per cent. 100 New Trumpet, 20s. 9d.

250 N. Zealand Kapanga, Debenture Bonds, 20s. 9d.

12s. 9d. 10 Akankoo, 7s. 6d. 20 Pioneer, 19s. 6d.

20 Standard Bank Lon- 50 East Lovell, £3½. 40 Great Holway.

don, £3 p.d., 32s. 6d. 100 Denbighshire.

Special business can be transacted in the shares against which prices are not affixed. Offers are solicited, and shall receive prompt attention by telegram or letter.

CHEAP COPPER SHARES.

Extracted from the INVESTORS' GAZETTE, PUBLISHED LAST EVENING, by—

MR. ALFRED E. COOKE,
Stock and Share Dealer,
76, OLD BROAD STREET, LONDON.
ESTABLISHED 1853.

There is a good advance in the price of copper, and before the highest is reached we believe that there will be a rise of several pounds per ton. This will be an immense benefit to many of our mines, and a very active business is looked for at the commencement of the new year.

One of the best and cheapest copper mines is WHEEL CREBOR. There has been an increased demand for the shares of late, and the quotation is firm. In completing the new shaft there has necessarily been some heavy work; but the shareholders will be rewarded by increased returns of copper. If the lode below the 120 is cut rich, as is expected, the value of the mine will be considerably enhanced. In our opinion, our clients will do well to procure an interest in Wheel Crebor while shares are low.

WEST CREBOR will attract more attention when Wheel Crebor shares advance. The shares are, therefore, well worth picking up as a capital speculation at 7s. to 9s. A little more than two years ago Crebor shares were being offered at 1s. 6d., and they have since risen to £13.

NEW WEST CARADON shares are also very cheap at about 10s. to 12s. The mine is in close proximity to the famous South Caradon, and is already making good sales of ore. The various points are being watched with interest by many knowing ones, and any day the price might double or treble in value. The company is well managed under the Cost-book System, and the calls only amount to 9d. to 1s. 6d. per share.

PARYS COPPER.—This company will be able to dispose of a large quantity of low grade copper ore if the price advances a little. The prospects are brighter than they have been for some time, and the shares are a good speculation at about 17s. 6d.

CARNARVON COPPER.—We have a good opinion of this mine, and believe that the returns will soon be increased. Shares can be obtained at about 16s. Both the shares of this company and of Parys Copper are fully paid.

P.S.—Since the above was written Wheel Crebor shares have advanced to 3½, 4½. They are still very cheap.

Shares in the above Mines can be supplied at LOWEST MARKET PRICE FREE OF COMMISSION, either for CASH, FORTNIGHTLY ACCOUNT, or for SETTLEMENT TWO or THREE MONTHS hence.

The INVESTORS' GAZETTE, containing SOUND and RELIABLE RECOMMENDATIONS, will be forwarded on application.

ALFRED E. COOKE,
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Notices to Correspondents.

LADY RASHLEIGH CONSOLS.—A great pressure on our space compels us to postpone until next week the publication of the letter from "Miner."
Received.—"Constant Reader" (New Jersey)—California Stamp Mill: We have not received the particulars referred to, or they would have been published.—"D. B." (Glasgow)—New Galvanometer.—"Old Subscriber" (Leeds)—"Shareholder" (Devon)—Moyar Gold Company.—"J. E. W. L."—W. P.—"H. B. R."—Cornhill—"C. S. R." (Alma, Colorado)—"G. G. B." (Liverpool)—"S. A. E."—"J. G. S."—"C. H." (Bowdon)—"L. E." (Onslow Gardens)—"J. B."—"O. P."—"Shareholder" (Chonales): You should attend the meeting next Friday, and obtain the particulars you require. Every attention will be paid to your questions, and information thereby elicited which may prove satisfactory to others as well as yourself.—"Constant Reader" (Belfast): Perhaps next week. We have been greatly pressed for space lately.—"P. J." (Newtown)—"A Shareholder" (Don Pedro)—"Disappointed" (Don Pedro)—"W. S." (Bow)—"R. M." (Marbella)—"E. L. M."—"J. D." (Marbella)—"J. C. B." (Neglected Securities)—"A. L." (South Australian Copper)—"G. M." (Copper Mines of Chili)—"Vigilans" (Gold Mines of Guayana).

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, DECEMBER 10, 1881.

FIRE-DAMP INDICATORS.

The importance of indicating the presence of fire-damp in mines has been recognised by mining engineers and scientific chemists, and several instruments have been invented for the purpose, but in most instances with doubtful success. It has been felt that such an indicator would enable mine officers to prevent the formation of dangerously explosive mixtures. Where gas was found to be accumulating by an instrument the ventilation could be so directed as to dilute it, but at present it often happens that gas is given off in large quantities without those in charge, or even those men working where the emission is taking place, being made acquainted with it. Were there, however, an indicator that would at once show the presence of gas in more or less quantities the miner might know when it was necessary to retire, and make known to the officials what was going on. A most ingenious and sensitive instrument for the detection of fire-damp was invented by the late Mr. G. F. Ansell, and was tested in several collieries, but it was of no practical use, because it indicated zero in an explosive as well as in a pure atmosphere, and, therefore, did not receive any encouragement from our mining engineers, and was not adopted. But we are now told that the Royal Commission on accidents in mines are endeavouring to find an instrument for indicating the presence of gas in mines, and already there are two or three inventions brought under notice that may be found to fulfil all the requirements of a gas indicator specially adapted for mining purposes. A French engineer, Mr. Coquillion, states that he has invented a portable apparatus by which ½ per cent. of fire-damp can be shown. It is simple, easily carried about, and is easily understood. Professor Dr. Mounier, of Geneva, has also invented an instrument for indicating the quantity of fire-damp in a mine. The instrument, which appears to have the same objections as Ansell's, is taken into different parts of a mine, and five minutes are devoted to each station for the purpose of analysis, and four times an hour an air-pump is worked which sucks the air into a test tube.

The instrument at each of the places is worked by clock-work, and at the commencement of the five minutes the connection with the outer air is closed by an electro-magnet, which pinches an india-rubber tube. A platinum wire is heated white hot by an electric current and burns the hydrogen, the carbonic acid being absorbed by the water, so that when the wire cools the air is contracted, and sucks up mercury in a tube attached to the test tube. As the mercury rises it makes successive contacts with platinum wires passing into the tube at regular intervals, and the intervals correspond to the height to which the mercury would rise if the air had been contaminated with certain percentages of fire-damp. Each time the mer-

cury touches a wire it sends a current to the pit mouth, and moves a kind of engine counter. After the further application of the heated platinum wire to complete the combustion the number finally recorded at the pit mouth is the percentage of fire-damp in that part of the pit indicated by the particular five minutes at which the indication is made. The electro-magnet being released opens connection between the test tube and the external air and the air-pump, and another instrument in another part of the pit takes up the work, and so on. It would almost appear that the instrument, although perhaps calculated for the purpose of detecting the quantity of gas in a mine, is far too intricate for instruments for indicating the presence of gas in mines. Simplicity is an essential. However, it will be interesting to hear more of instruments having the same object in view, as it may then be possible for the Royal Commission to recommend an instrument that will show where gas is or has accumulated, so as to give increased safety to those who have to spend a large portion of their lives underground.

RAILS IN THE UNITED STATES.

The astonishing activity of the American railroad interest has been the main cause of the, at any rate, relative prosperity which has prevailed this year in the British iron trade. Never in the wonderful history of the United States has such a prodigious extent of new railroad been under contract, or under arrangement for completion in a comparatively short period, as that which now awaits our notice. We may divide the new railroads now on hand in the United States into five groups—first, those between the Atlantic coast and the upper Mississippi, and north of the Ohio and the Potomac rivers; secondly, those between the Atlantic coast and the Mississippi, and south of the Ohio and Potomac rivers; thirdly, those between the Rocky Mountains and the Mississippi, and north of the latitude of St. Louis; fourthly, those between the Rocky Mountains and the Mississippi, and south of the latitude of St. Louis; and fifthly, those west of the Rocky Mountains. The first of these groups comprises 4791 miles of new line, the principal being the Boston, Hoosac Tunnel and Western, the Chicago and Atlantic (Eric extension), and the New York, Chicago, and St. Louis; the second group comprises 2352 miles, the principal being the Alabama, New Orleans, and Texas Pacific Junction, and the Georgia Pacific; the third group comprises 4063 miles, the principal being the Atlantic and Pacific, the Chicago, Milwaukee, and St. Paul extension, the Republican Valley and Denver extension, the Denver and Rio Grande, the Northern Pacific, the St. Paul, Minnesota, and Manitoba, and the Union Pacific; the fourth group comprises 4140 miles, the principal being the Fort North and Denver City, the Galveston, Harrisburg, and St. Antonio, the Kansas City, Springfield, &c., the Northern Pacific, the St. Louis, Iron Mountain, and Southern, the St. Louis and San Francisco, and the Texas and St. Louis; and the fifth group comprises 540 miles, the principal being the Oregon and Navigation. We are not so much concerned with the details of the new lines on hand as with the general result, and this general result promises to be the construction of 15,886 miles of new American railroad by Jan. 1, 1883. Such a prodigious amount of new construction was never before witnessed in the United States; and although the Republic was certainly never so populous, so powerful, or so prosperous as it is at the present time, still the serious question presents itself for consideration among reflecting Americans and among reflecting observers throughout the world whether the task which the American railroad interest has undertaken is not somewhat in excess of its strength, great as that strength undoubtedly is.

The Americans have been good customers for British iron and steel rails in the year which is now closing. Thus we have sent them 88,479 tons of iron rails in the ten months ending October this year, as compared with 82,328 tons in the corresponding period of 1880, and 14,731 tons in the corresponding period of the year 1879. Similarly our exports of steel rails in the first ten months of this year attained the substantial aggregate of 171,100 tons, as compared with 106,958 tons in the corresponding period of 1880, and 13,682 tons in the corresponding period of 1879. It follows that in the first ten months of this year we sent the Americans 259,579 tons of iron and steel rails, a total which seems likely to be carried to nearly 300,000 tons when the year has fully run its course, and which certainly does not at all compare badly with the 500,000 tons which represents our maximum exports of railway iron to the United States in any one previous year. The activity must have been great indeed which enabled us to obtain a market in the United States for nearly 300,000 tons of our rails this year when we take account of the fact that duties intended to be prohibitory are levied upon every ton of iron and steel entering American ports. As regards the year upon which we are about to enter, it is tolerably certain that if the Americans really can complete 15,886 miles of new railways during the next 13 months the demand for British iron and steel rails upon the American markets will be still larger in 1882 than in 1881. But then the serious question occurs again whether the construction of such an enormous extent of new line in so comparatively short a period is not beyond the strength of American capitalists and American contractors. We incline to think that it is, and that a considerable portion of the new lines mapped out for completion in 1882 will have to stand over until 1883. However, this will not be a matter of very great importance provided the extraordinary vigour which has been impressed on the work of American railroad establishment does not bring with it a repetition of the financial disasters of 1873.

BORING FOR COAL IN A NEW FIELD.

In connection with the Hull and Barnsley Railway, now in course of formation, an attempt is being made to find coal in a part of Yorkshire a considerable distance from the existing fields now being worked. Lord BEAUMONT, it appears, has taken the initiative in a most spirited manner, and is about to have several bore-holes made on his property between Carlton and Drax, whilst the owner of an adjoining estate also proposes to bore in the event of coal being found by Lord BEAUMONT. The first bore-hole is close to the new line of railway, rather more than a mile from the River Aire, four miles from Goole, six miles from Selby, and twenty-five miles from Hull. In the event of coal being found so near to the two ports of Hull and Goole it would seriously injure the trade of South and West Yorkshire, from which many thousands of tons of coal are sent weekly to the places named, and would, in all probability, lead in the first instance to severe railway competition, to be followed by an understanding between the rival companies, in which the interest of the colliery owners would not receive much consideration. One bore-hole, it appears, has already been made, and within six days 50 feet have been pierced, but it is stated that some months must elapse before the coal will be reached if it is found at all. Mr. GREAVES, the engineer, who has adopted the rock-boring drill, the bore-hole being 9 in., is going down to a considerable depth, expecting to find the well-known Barnsley seam. In connection with the venture it may be stated that Mr. SYKES, M.P., of Brantinghamthorpe Hall, a short time since made some borings on his estate, with a view to reaching the coal measures, but discontinued operations after going down a short distance. Those who have paid considerable attention to the coal formation of the West Riding and its extension eastward are of opinion that he acted wisely in so doing. The Barnsley coal, to which the boring at Drax is expected to reach, has not been worked or met with nearer than about 25 miles from Drax, the nearest point in a straight line being the Denaby Main Colliery. But it is worthy of notice that the Barnsley seam of coal, in its development to the north-east, after leaving the town from which it takes its name, greatly deteriorates, until it becomes in a distance of 12 miles almost worthless. At Denaby Main the coal is at its thickest, being about 10 ft., but the average in the South Yorkshire district is from 8 to 9 ft. At Darton, four miles north of Barnsley, the coal is of good quality, but a dirt parting that first makes its way some distance south of the town increases in thickness. A mile or two further on the coal falls off a good deal, and still further north, at Crigglestone, it splits into many small seams by dirt partings, so as to be utterly worthless, and as it goes further on it gets still worse. Near to Wakefield there is a seam that corre-

sponds with the Barnsley seam, and is for the most part a mixture of thin beds of coal or dirt, of little or no value.

The seam has not been worked to the east to any extent, so that the new ground being bored is almost an unknown land, so far as the coal is concerned. Therefore the more credit is due to Lord BEAUMONT for attempting to solve so important a problem, that, if successful, would be of the greatest value to the landowners, whose properties are so close to Goole and Hull, and near to the new line of railway. The Midland coalfield, of which the West Riding forms a part, has its eastern margin defined by the escarpment of the magnesian limestone, with its subordinate lower Permian sandstone, which extends northwards beyond the limits of the coalfield itself. The coalfield, in fact, lies in the shape of a basin, the northern, southern, and eastern edges of which underlie the new red Permian and other overlying secondary strata. The field evidently extends under the Permian and triassic formation. Near to Wakefield the beds gently tend to rise towards the north-east, near to and under the magnesian limestone; and in the centre of the coalfield the Ackworth rock, a red sandstone, is another and the highest known carboniferous bed, and represents the central portion of the whole basin, and Drax, where the boring is now being made, is nearly due east from there. To the east of the field we have what are termed the concealed coal lying under the Permian and new red beds. It is, indeed, estimated that the whole of the important beds of the coalfield lie underneath the new red marl, and even a small part of the lower lias at depths of 4000 ft. and under; for the gradual increase of thickness due to the coming in of successive formations of magnesian limestone, new red sandstone, red marl and lias is probably compensated for by the gradual rise of the eastern edge of the basin towards the base of the lowest formation overlying the coal measures. The area of coal east of the Permian escarpment is upwards of 670 square miles in the great Midland field. In the direction of Drax, at Byram Hall, four miles north-east of Pontefract, the magnesian limestone has been proved to be 312 ft. thick, something like what it was at Shireoaks, where the Barnsley bed was found at a depth of 510 yards. Whatever may be the result of the boring now being made near to Goole, the issue will be looked forward to with great interest, not only by the colliery owners of the West Riding, but by the landowners and others in the district, where the finding of the coal at Drax would be followed by other borings and sinkings. This would immensely increase the value of the property in such districts most favourably situated as they are for trade with Hull and Goole than any other.

INTERNATIONAL EXHIBITIONS.

Mr. ELLIS LEVER, of Manchester, has just issued a rather remarkable book, entitled "Suggestions for a Grand International Exhibition of the Industrial Arts, Manufactures, Fine Arts, Scientific Inventions, Discoveries, and Natural Products of all Countries, to be held in Manchester in the year 1882; accompanied by a Brief Historical Review of the Origin, Rise, Progress, and Development of the Chief Exhibitions which have Preceded it from 1797 to the Present Time." This long title indicates the nature and scope of the work, but it does not exhaust all its features.

We have called the book remarkable, and it deserves to be so called, for it is seldom that a series of suggestions is placed before the public in so complete a form as we find to be the case in the work before us. The first part deals with the proposed exhibition, and we find that almost every detail of classification and arrangement is fully worked out. Besides which there are many hints as to management, as for example one with reference to facilities for the sale of goods by exhibitors, which promoters of exhibitions will do well to take note of. Many others of a like character deserve to be attentively studied and followed.

The second part of the book—some 60 pages—gives a wonderfully accurate summary of the history of exhibitions from the time when they were first instituted, under the first French Republic, in 1797. From that date to the close of the Milan Exhibition, and of the Electrical Exhibition in Paris, the record is full, succinct, and accurate. No one can rise from a perusal of this work without being struck with this fact—that exhibitions have played a great part in the industrial history of the present century. We can trace the industrial and fine arts, and of scientific inventions and discoveries, and we can follow closely the development of commerce and trade; and, furthermore, we can understand how it is that some nations have become almost dangerous competitors in the markets of the world. The history of those exhibitions lifts the veil, so to speak, and shows us the world in its workshops. Their influence has been great heretofore, and we doubt not but that it will be greatly extended in the future. And if we are to hold our own we must endeavour to secure some of the advantages which such exhibitions bring to the countries in which they are held, and no one will grudge to Manchester the honour of holding one which for completeness and variety will fairly compare with any that have yet been held.

THE DUPLEX LEVER CAPSULE COMPANY.—There is, it appears, every prospect of this undertaking being very successful. The demand is enormous for capsules, stoppers, and covers of all sorts, and as this company will furnish the best in the trade—an article admittedly superior to anything hitherto invented—it should command the greater portion of the business. It is understood that offers have already been received from abroad to work the patent at a royalty; but the directors' intention is to sell the foreign patents outright, by which means the shareholders would make large profits, apart from the income arising from the manufacture in England.

IMPROVED FOG SIGNALS.—In lieu of the usual explosive signals now used for signalling on railways during fog, Mr. ARTHUR KILDAY of Finsbury Pavement, proposes to employ a system of bells and levers. Close beside the metals runs a second rail with two slight curves and attached to the lever used for the ordinary semaphore and worked in sympathy therewith. From the side of the engine hangs a small rod terminating in a small wheel and attached to a bell on the locomotive. When the line is clear the rod comes into contact with only one curve or wave of the second rail, and the bell, therefore, gives only one ring, which corresponds to the single explosion of the detonator under similar circumstances in the present system. Should, however, the line be blocked the rod would strike both curves, and two rings of the bell would warn the driver that he must stop. Mr. Kilday also proposes by a simple contrivance to turn off the steam and put on the Westinghouse brake when the line is blocked; but his attention will chiefly be turned to the introduction of the new fog signal.

BORING BY MATHER AND PLATT'S APPARATUS.—In the neighbourhood of Chesterfield considerable interest has been excited by the boring operations which have been going on for some time past at Brampton for the purpose of reaching a spring of fine water. The boring appliances are of a most interesting description and show what advances science has made on the older methods of boring. The work is being carried on by Messrs. Mather and Platt, the well-known Salford firm, who have been engaged in some of the most extensive borings in the kingdom. The borer consists of a large steel-toothed driver or hammer about 12 inches in diameter, lifted by steam-power and dropped down the guide tub into the bore-hole. One of the principal features of the boring apparatus is the plan of using india-rubber rings, which are fitted round the tubing whenever there is likely to be a supply of water other than that which is being bored for, so shutting it off. When the water that is being bored to has been found, and the tubes are fitted into the bore-hole, the rings are pressed out round the tubes at a point above the strata from which the supply is to be drawn, so forming a perfect block between the tubes and the bore-hole, rendering the percolation of the water not required impossible. The neighbourhood of Brampton, it is stated, in connection with mining operations has been found to have many "faults," but the results of the boring operations show that the strata gone through were as free from these as was expected, confirming the opinions of those who had paid some attention to the geology of the locality. The Brampton seam of coal was met with at a distance of about 40 feet from the surface, so that one would

think it would be well worth working at such a shallow depth. The mechanical apparatus, from its originality and ingeniousness, has naturally attracted a good deal of attention, and the firm on whose behalf the boring is being made, Messrs. Chater and Co., have kindly shown it in operation to a considerable number of persons, who seemed much pleased with the working of apparatus new to the district, but at the same time simple and most effectual in doing the work required.

THE GOLD FIELDS OF SOUTH AFRICA.

That the Transvaal was deserving of careful prospecting for minerals was shown by correspondents of the *Mining Journal* several years since, and there can be no question that had a permanent and strong British Colonial Government been established a large amount of British capital would ere this have found its way to the region, to the mutual advantage of the inhabitants and of the capitalists supplying it. The abandonment of the country to the rule of the Boers so severely shook confidence in everything connected with the Transvaal, and indeed with South Africa generally, that any attempt to move commercial matters was futile. It appears, however, that this unfavourable feeling is now gradually passing away, and the Kimberley correspondent of the *Mining Journal*—a gentleman who is not only a sound practical miner, but has long been officially connected with the province—in his letter published on Nov. 26, remarks:—"Since I last wrote mining has not changed here, but the rich discoveries of gold in the Lydenburg district of the Transvaal is causing some excitement; but most people here are so struck with diamond scrip that they are not in a position to touch anything else. I have seen some very fine samples from Lydenburg district taken from Spitz Kop and Waterfall Creek. The quantities varied from 3 or 4 ozs. to 2000 ozs., and was of splendid quality."

And this announcement is the more interesting inasmuch as this Spitz Kop property—which, it should be explained, has been heard but little of owing to the natural reluctance of the miners working it to let their profits be known, although considerable quantities of alluvial gold from it has already reached the London bankers connected with South Africa—has, it seems, passed into the hands of a French proprietor, Mr. Jules Franck, by power of attorney from the original owner, Mr. T. Van Niekerk, in 1878. A careful survey and report upon the property was made in May, 1878, by Inspectors P. D. de Villiers, T. J. Breytenbach, and A. T. Jansen, who after detailing the exact position of the estate remark that it is good for cattle, well provided with water and wood, and lies about five hours by horseback from the village of Lydenburg. The document next in importance is the certificate of Mr. James Gunn, of Pilgrims Rest, who as the acting gold commissioner on the New Caledonia Gold Fields (as they were by that time designated) certified that the farm, Spitz Kop No. 1, the property of Mr. Tobias Van Niekerk, was situated within his jurisdiction, and had been proclaimed to be a payable gold field. The said farm, he added, was well known to him, and he also certified that during the course of a year or more mining for alluvial gold had been carried on on the farm with good success, and that the farm had yielded and was still yielding a considerable quantity of gold. And, lastly, there is the affidavit of Mr. J. W. Abbott, the license inspector of the district, stating that he accompanied Mr. Van Niekerk, the owner of the Spitz Kop farm, to the claims of Messrs. Silo and Rae, miners, certificates Nos. 12 and 24, situated thereon, that he saw Mr. Van Niekerk take a quantity of wash dirt from the face of these claims, and that he saw this packed in two small boxes, securely fastened and sealed and sent to Lydenburg. It thus appears that every care has been taken to verify the statements made with regard to the property, so that it is very fairly urged that if it be placed upon the market at a reasonable price it should offer a fair field for capitalists.

LAKE SUPERIOR MINERAL LANDS.

In no other part of the world are the mineral deposits more varied and extensive than on the islands and around the shores of Lake Superior. Deposits of iron, silver, copper, and gold have been found there in great abundance, and worked at a great profit. The deposits of silver and copper are especially remarkable, these metals existing there in their native or metallic form. A rock in the British waters of the lake, named Silver Islet, is an almost uniform mass of silver. Millions have been extracted from it at a vast profit, and millions are known to be in reserve. The silver was discovered by a Canadian company, who, rather than conduct mining on their own account, sold the islet to United States capitalists, who have enriched themselves by extracting the silver. On the south shore of the lake the copper deposits have yielded simply fabulous dividends to the American companies by which they are treated. The eminent geologist, Dr. Sterry Hunt, has pointed out "That one-third of the entire copper consumption of the world is obtained from about ten mines on the south shore of Lake Superior, being more than the entire output of Europe." The same distinguished and trustworthy authority has also stated, as the result of personal investigation, that "if the resources of capital with energy and skill are applied to this region—the Canadian, or north shore—as they have been for the past few years to the south shore, I cannot doubt that as great results may be achieved."

A Canadian contemporary, the North Shore Miner, wrote about a year ago to the effect that "The American capitalist is the one on whom we must depend for the development of our rich resources. There are no Canadians who have the push and stamina sufficient for the purpose." It would be incorrect to say that Canadians have entirely neglected the mineral riches which abound in this region of their great Dominion; but it is literally true that they have not profited by their knowledge. The case of Silver Islet is one in point. If the Canadians who discovered the silver there had been wise enough to supply the capital wherewith to extract it they would not only have been free from reproach, but they would have entered into the possession of vast wealth. Another Canadian company, the Quebec and Lake Superior Mining Association, expended a large sum in exploring the copper-yielding lands on the north shore, and in acquiring properties which were rich in minerals. They did a good deal of mining, but owing to want of experience in selecting the best paying ground they lost their capital. Instead of profiting by their experience, as the United States miners did on the south shore, they simply declined to furnish the necessary capital wherewith to prosecute the work which they had begun. Mr. W. W. Stuart, of Montreal, the President of the Association, was not inclined to follow the example of his fellow-shareholders. By acquiring a large number of shares he was able to give effect to his views. More than once he visited this country only to find that our mining authorities were as sceptical as his Canadian countrymen. They could not credit that the specimens of native copper which he brought with him represented deposits of a like character, and on a large scale. Indeed, at the time of his first visit to this country mining for native copper was a novelty here to those who had large experience and full knowledge of mining for copper ores. The former is entirely different from the latter. When a deposit of native copper is found the product has merely to be stamped and washed in order to extract the metal. In the case of sulphurets of copper ten processes have to be gone through before ingot copper is obtained. Moreover, the native copper is far purer than any other, and for certain purposes, particularly for forming electrical conductors, it is so superior to ordinary copper as to command a much higher price. It may be remarked in passing that, owing to the enormous development of lighting by electricity, a new and increased demand for native copper has sprung up.

A visit made by Mr. Stuart to this country a year ago had the result, as is known to many of our readers, of the formation of the Michipicoten Native Copper Company (Limited), to acquire and work 10 square miles of freehold mineral land belonging to the Quebec and Lake Superior Mining Association. The terms on which this land was acquired cannot easily be paralleled in the history of mining enterprise. The shareholders in the English company paid nothing in cash for an estate on the island of Michipicoten, which is finely wooded, which contains much land suitable for agricultural purposes, and which has a considerable value independently of the mineral

treasures beneath the soil. Not merely did the vendor take the entire payment in shares, but he displayed his belief in the accuracy of his statements that the returns from mining would be speedy and large, by agreeing that his shares should not rank for dividends till the subscribed capital had been returned to the English investors out of actual profits. Since this arrangement was concluded mining has been vigorously prosecuted by the Michipicoten Company. We have kept our readers informed as to the results, which are equal to the most sanguine anticipations. The specimens of ore actually raised by the company, which Mr. Batters, one of the directors, recently brought back after visiting the mines on Michipicoten Island have surprised our mining experts as well as gratified the fortunate shareholders. It is a noteworthy circumstance that Canadians are now so much impressed with the great future of the Michipicoten Native Copper Company that they have readily given a premium for many hundreds of shares.

Another property belonging to the Quebec and Lake Superior Mining Association has been recently acquired by an English company. This is situated on the north shore at Mamaine, and has been proved, and contains beds of native copper ore and veins of sulphurets which contain as much as 60 per cent. of copper and 36 ozs. of silver to the ton. This company is named the Lake Superior Native Copper Company. As in the case of the Michipicoten, so in this case. No cash is paid for the 10 square miles of freehold land, the entire payment being made in shares, while the holders of these shares will not participate in dividends till the subscribed capital has been returned in full to the shareholders. We understand that several thousand pounds have been expended in exploratory works in order to discover the best spots where to sink shafts and to erect the necessary machinery. These preliminary operations have proved so successful that a public issue of shares wherewith to provide the requisite working capital will soon take place. Should these enterprises have the success which seems probable a new chapter will be opened in the annals of copper mining, while the investors in the copper mines in British territory at Lake Superior will have as good reason to be satisfied as the investors in the copper mines at the Cape of Good Hope.

PROGRESS OF CORNISH LIMITED MINES.

The reports published to-day from the East Wheel Rose, Old Shepherds, Mounts Bay, and Tresavean Mines will be read with special interest by those shareholders who have entered into these concerns not as speculators but as *bona fide* investors. Mining offers many temptations to the former class, it is true, but it is primarily for the benefit of the latter that it should be, and in the cases of these companies is carried on. Hence the respective reports from East Wheel Rose, Old Shepherds, Mounts Bay, and Tresavean will be received with peculiar satisfaction by all those who wish to regard their holdings in the light of permanent investments, as distinguished from those who throw their shares upon the market directly they see the opportunity of clearing a few shillings by that operation. The reports then are records of substantial progress, and those who read between the lines can discern signs of coming wealth, which the agents hardly dare as yet to clothe in emphatic language. For example, at East Wheel Rose Middleton's lode is reported to be producing "splendid work for lead," and to be growing rich as it is driven upon. At Old Shepherds, in the western ground, the lode is "of a most promising description," and the agents say that the indications are sufficient to warrant any reasonable outlay to further prosecute this in depth. The agent at Mounts Bay shortly expect to cut ore in the engine-shaft at Trebarvah, where the present appearances lead them shortly to expect something good. More than this, a "capital improvement" is notified in Richard's shaft, where the lode is 1 ft. wide, and worth fully 200 per fathom. At Tresavean the property is so extensive as to embrace five grants, and these have the almost incalculable advantage of being in communication by means of an adit. Necessarily a large amount of preliminary work has had to be done, but the agent is firmly of opinion that in Tresavean there is a good mine, which will no doubt again prove one of the richest in the county. It is thought that these reports are so encouraging and so indicative of real progress that shareholders who would cast their holdings upon the market at anything like the present prices would be guilty of financial indiscretion.

RUSSELL UNITED MINES.

Some months since, after the acquisition of the East Wheel Russell sett by this company, a new shaft—Stephens—was sunk on the course of the lode for about 15 fathoms, when it was found impossible to continue the sinking in consequence of the increase of water, and therefore operations on that lode had to be suspended for the time. The attention of the agents was at once directed to a remedy, and there being a large water-wheel in another part of the mine, with plenty of available water power, it was determined to make use of it, instead of erecting a steam-engine, and therefore a line of rods, 500 fathoms, or more than half a mile in length, was laid down through the Morwell woods for connecting the wheel with the pumping gear at the shaft, and much curiosity was felt in the neighbourhood as to whether such experiment would prove successful. However all doubts were laid to rest on Saturday last, when the wheel, set at work by the force of water, gracefully performed its revolutions. Several of the local shareholders and all the employees were present. Mr. E. Crocker, resident director, performed the christening ceremony, amid the loud cheers of those assembled, by calling it the "Lang" wheel, as a compliment to the chairman of directors, whose family has been connected with the mine for more than a quarter of a century. The wheel is 45 ft. diameter, 5 ft. breast, and 6 ft. stroke. Cheers were given for the directors, Messrs. Lang, Hamilton, and Stephens, as well as for the absent shareholders. The party then adjourned to the account-house, where a substantial dinner had been prepared for the workmen, and it is scarcely needful to say that the excitement of the proceedings, and the air of a cold winter day, were good aids to digestion. The men sang grace both before and after meat, in Cornish fashion, and made a deep impression, partly from the fact that such a practice is now of rare occurrence. After the employees had been thoroughly entertained the shareholders present dined, Mr. E. Crocker occupying the chair, and Mr. T. W. Greenfield (purser) the vice-chair; the others present being Messrs. H. Reynolds, G. Prout, R. C. Seccombe, John Turner, Captains Gifford and Bray, and Mr. Edward Alford, whose engineering skill throughout was thoroughly appreciated and warmly praised. In responding to the toast of his health Capt. Gifford, the manager, stated that altogether five points would now be vigorously prosecuted—sinking Stephens' shaft on the East Russell lode, driving three ends in the Impham lode, and putting out a cross-cut to intersect the north lode. He also stated that both himself and Capt. Bray were as sanguine as ever that as depth was obtained on the East Russell lode success would follow. The feeling was expressed that the cross-cut to intersect the north lode should be pushed on with all possible vigour, and it was hoped that the directors would see their way clear to resume the sinking of Matthews' engine shaft, at all events until the junction with the north lode is reached.

The East Russell lode has an historical interest in the annals of mining, and any who are interested in the past workings of it can do better than refer to Mr. Murchison's useful "Review of British Mining" of past years, where many full reports by some of the most eminent mine agents of the time will be found. In a report by the late Capt. Charles Thomas, of Dolcoath, it is described as a lode "well defined, easy to work, with a moderate underlay south, having the general appearance and features of extensive productiveness in depth." The composition of the lode being principally gossan in great abundance was believed to indicate a large quantity of ore beneath it. That this and other reports were not without foundation is instanced by the subsequent working of the East Russell Company. During the year 1859 the 88 fathom level was driven through a fine course of ore, worth 200, 400, 600, 1000, and 1200 per fathom; a rise in the back of that level 1000 per fathom, while a rich lode in the 77 east was for a short length valued at 4000 per fathom. The present company was formed some few months back, and the whole of

the 36,000 shares subscribed for by the holders in the late Cost-book company who previously worked the mines. The shareholders are an influential body of gentlemen. The holders of about one-half the shares reside in London, and the remainder for the most part in Bristol and in the neighbourhood of Tavistock.

PRINCE OF WALES SLATE COMPANY.

It would seem from the telegram given in another column that at length success is about to dawn upon this enterprise. The original company was started in the year 1864, and was so favourably regarded that the capital—45,000*l.*—was readily subscribed for privately without being advertised. The operations of the company were, moreover, so promising that very soon an arrangement was entered into with the landlord for the extinction of the rent and royalties and the acquisition of additional tip-ground, the want of the latter being the great defect in many otherwise valuable quarries. This step, however desirable it may have been, was unwise at the time, inasmuch as the company had not the means to carry out the purchase, and so got into difficulties. Subsequently, by an issue of debentures (at the present time amounting to 15,500*l.*, bearing interest at the rate of 5 per cent. per annum), the redemption of the royalties was completed, so that the whole estate, including a farm of 160 acres, is now held for the remainder of the term of the lease absolutely free from rent and royalties, the importance of the benefit of which may be estimated from the fact that some of the quarries in the Festiniog district are now paying 7*s.* 6*d.* per ton royalty on all the large size slates they sell.

Meantime the work necessary to the development of the Prince of Wales Quarry was carried on, and about 7000*l.* worth of slates (made for the most part incidentally in opening out the galleries) were sold—an unprecedented result from ordinary preliminary operations in a slate quarry. One other drawback had to be removed—the difficulty and heavy cost (amounting to 12*s.* 6*d.* per ton) of transit of the produce of the quarry to the shipping port of Carnarvon. This was met by the application on the part of an independent company to Parliament for an Act to acquire and adapt into a locomotive line of railway the tramway constructed from the Gorsedda Slate Quarry to Portmadoc, and to construct an extension of the line to the Prince of Wales Quarry. This line has been constructed and is now open for traffic, the cost of carriage being thereby reduced to 3*s.* 8*d.* per ton. As part of this last-mentioned arrangement, the Prince of Wales Company became also possessors of the Gorsedda Slate Quarry, and here, too, the royalties have been redeemed. At the Prince of Wales Quarry recent operations have been directed to the proving of the western vein, and for this purpose a cross-tunnel, which has reached a total length at the present time of 70 yards, has been driven at a depth of 60 yards from surface. This level, from the reports received, seems to be now entering the good slate rock to the west, and if this good rock continues for the remaining width of the vein (50 yards) there will be a very large body of rock to operate on. We heartily wish the shareholders all the success which they deserve for having so bravely stood by the undertaking, and brought it into its present promising condition. If, as seems probable, favourable results are now about to be obtained, the Prince of Wales Slate Company will be another instance of difficulties overcome, obstacles removed, and ultimate success. Both the Prince of Wales and Gorsedda Quarries are situated on the hill side, and can, therefore, be worked to a great depth by open galleries without pumping or lifting machinery, which forms a heavy item in the cost of working many slate quarries.

What the future of the slate trade may be it is not necessary to predict, but indications certainly point to the exhaustion at no very remote date of some of the largest quarries now in operation, and the stoppage of others by reason of the difficulties attending their mode of working. It is to new quarries, therefore, that consumers must look for their future supply, and there is no reason why the profits derived from slate quarries should not be as large in the future as it has been in the past.

FOREIGN MINING AND METALLURGY.

The French iron trade is still characterised by great activity. At Paris warehouses are being emptied, and in the provinces orders are being given out as freely as producers can undertake them. Quotations have not varied materially upon the French iron markets, but an upward tendency has generally prevailed. Old rails have been in some request, at 5*l.* to 5*l.* 2*s.* per ton. Coke-made iron has been dealt in currently at St. Dizier at 8*l.* per ton. The German iron trade is still characterised by a persistent advance in quotations. Pig has been firmly supported, and has continued to advance. Contracts are about to be let for 22,400 tons of steel rails and 15,800 tons of iron sleepers for lines owned by the German Government. Contracts are also about to be let for about 5500 tons of rails and 3700 tons of iron sleepers for railways at Berlin. The German mechanical construction establishments are generally well employed. Among the locomotive orders received may be mentioned 20 for the Northern of Spain Railway and 32 for the Upper Italy Railway. Contracts for 54 locomotives have been also let at Cologne. It was announced recently that the Bram-le-Comte Workshops Company had obtained a contract in connection with some exhibition buildings to be erected at Madrid. It may be added that the same works have now obtained an order for the ironwork required for exhibition buildings at Amsterdam. The Angleur Steelworks Company is equipping a rolling mill for turning out rails of double length.

The Belgian iron trade presents a highly satisfactory tone. Everywhere there is a considerable amount of work in hand, and the future appears to be assured, at any rate for some months to come. The tendency to a further rise in quotations seems to be becoming general, and it is a long time since Belgian metallurgical industry was in such a favourable and promising condition. The works producing plates and boiler-plates are overdone with orders, and the construction workshops find it almost impossible to make deliveries within any given time. An extreme scarcity of rolling stock prevails in Germany, and measures will have to be taken to make good the deficiency. It is affirmed that more than 200 locomotives and 10,000 trucks will have to be ordered. The French railway companies are also offering orders for rolling stock to whoever will undertake them, as the French works are so much occupied that they cannot very readily accept new contracts. The Upper Italy Railway Company has sent Belgian firms orders for 2000 trucks, while the Northern of Spain Railway Company has ordered 500. So much work thrown upon a market already overdone with orders seems likely to involve a sensible advance in prices; and if, as has been stated, the Belgian Minister of Public Works has ordered 150 locomotives and 2000 trucks, he has probably acted sensibly in doing so. Pig has been held with much firmness in Belgium; the production of the Athus Works is said to be engaged for the whole of the first quarter of 1882. The Châtelet and Marchiennes Blast Furnaces Company is about to extend its production.

Firmness continues to characterise the Belgian coal trade, and with the exception of domestic qualities, which are for the moment in rather less request, all descriptions of combustible have shown a more or less marked upward tendency. It is long since Belgian industry presented such favourable aspects as at present, and the Belgian collieries are profiting largely from the situation. In the Hainaut coal quotations have not varied, but the stocks on hand have been rather considerably reduced. A similar report may be made with respect to the Liège basin. Those owners of blast furnaces who a few months since concluded contracts for supplies for some time in advance may now congratulate themselves on their foresight. The state of the French collieries continues satisfactory, but as quotations were already very high no further advance can be reported. The Northern of France Railway Company has concluded a contract with the Ferfay Colliery Company for the supply of 60,000 tons of coal, at 9*s.* 7*d.* per ton, deliveries to be spread over a term of three years. The quotation for household coal at Paris is 2*l.* 1*s.* 8*d.* to 2*l.* 2*s.* 6*d.* per ton; milder weather, which has prevailed during the last few days, has occasioned a sensible falling off in sales. There is little fresh to report with respect to the German coal trade; prices have risen slowly, but in a continuous fashion. Con-

GOLD MINE IN THE TRANSVAAL.

The celebrated SPITZ-KOP GOLD MINE, favourably referred to by the local Kimberley Correspondent of the MINING JOURNAL in his letter published on Nov. 26, CAN BE ACQUIRED UPON EQUITABLE TERMS, a provisional contract having been obtained in 1878 before the immense value of the mine was ascertained.

Negotiations can be entered into, and all necessary documents, powers of attorney, &c., can be produced by Mr. OTTO ROTHSCHILD, Diamond Merchant, 11, Hatton Garden, London, E.C.

WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS,
MINEOWNERS, STOCK AND SHARE DEALERS &c
1, ST MICHAEL'S ALLEY, CORNHILL, LONDON.

We have frequently explained the "unit" in regard to copper ore sales. If copper is at 10s. per unit—ore of 7 per cent. produce (that is, when it will take 100 tons of ore to produce 7 tons of copper) will bring 3l. 10s. per ton; at 15s. per unit, 5l. 5s. per ton. At the sale in Cornwall last week the average produce of the ore sold was 7 per cent., and it brought 3l. 19s. 6d. per ton, or an average of rather more than 11s. per unit. Copper is now about 69l., and we want to see it about 75l. to give us 15s. per unit.

History sometimes repeats itself. In the Review of the Progress of Mining for the year 1854, first published in the *Mining Journal*, and then as a pamphlet, Mr. Watson wrote—"During the late mania for gold mining no less a sum than 3,000,000l. was lost in speculation. When the fever was at its height I publicly referred to its probable issue, and out of a nest of companies formed not one has ended favourably, whilst many have been proved the veriest bubbles it was possible to conceive. In my review of the year 1852 I gave the names of 13 only of the Australian and Californian companies which then bore a market value of 2,700,000l.—these are now comparatively worthless." * * Gold and foreign mining companies obtain admittance not only to the Stock Exchange but to the Official List, the latter giving to them the stamp of genuineness by which many persons, especially in the country, are deceived."

We estimate the Crebor ore—413 tons—will realise about 1400l., or 100l. more than the last sale.

We have received a great many questions from different correspondents this week with regard to East Blue Hills. Many of them have been from time to time referred to in these columns, for we have kept its points and its prospects clearly before our readers. The mine was introduced by us in April last in 12,000 shares of 5s. each, the shares in the first instance being offered to shareholders in Blue Hills, and every share applied for allotted at par. The object was to clear an adit 50 fms. deep to cut the Pink lode. Since then an extension of the sett has been obtained so as to take in West Kitty lode. These are two important points in prospect. The Baldhu lode has been opened at the 30 and 40, and when a winze has been communicated between these levels good returns of tin will be made. The 40 east on this lode improved last week to 30l. per fathom, and caused the demand for shares. Out of the capital of 3000l. about 500l. has been spent; the monthly cost is about 100l., and the first sale of tin on Nov. 15 realised 97l. The mine can be worked 50 fms. deep without machinery.

The mine it will be seen has been inspected this week by Capt. Hambly, late manager of Wheal Agar and now of Wheal Uny, and he values the lode in the 40 level at 40l. per fathom. This discovery is equal to that made at West Kitty, and we trust it will turn out quite as important.

The lode in the shaft at Wheal Crebor has improved to 10l. per fathom, and shows every indication of further improvement.

Prince of Wales is gradually improving in the 90 end, which looks well for cutting the lode at the 102.

Another trial has been made on the refuse ores at Langford, and very successful; indeed the agent is now satisfied that the process will answer. Some of the stuff with 9 oz. of silver in it came out as matte with 40 oz. The directors are in treaty for the necessary machinery to work the mine vigorously.

The latest report from East Blue Hills states that the lode has just been cut into at the 50 (adit) level beyond the "fault," and in a few days we may hear of something good in this level also. Capt. Hambly in his special report states that these "faults" or "crossings" "are favourable for the character and productiveness of the lodes in this district." The 40 level, Capt. Hambly says, has been worth 30l. per fathom for three years and is now worth 40l.

The Parys meeting went off very satisfactorily, and with the discoveries in the mine and the rise in copper we hope soon to see shares more than double the present prices.

SHEPHERDS WHEAL ROSE.—In the High Court of Justice, on Monday, Mr. Justice Chitty dismissed, with costs, the petition to wind-up this company. The grounds of the petition were that the prospectus was misleading, and that certain advertisements had been improperly inserted in the public newspapers by the directors for the purpose of inducing subscriptions; that the mine, the property of the company, was worthless; that the company had inadequate capital for the working of the mine; and that, in fact, the company was a bubble. It appears that several actions have also been brought by shareholders against the directors who issued the prospectus seeking to set aside the allotment of their shares. A considerable number of affidavits have been filed on both sides, and the hearing has occupied the greater part of three days.—Mr. Ince, Q.C., and Mr. Job Bradford appeared for the petitioner, Mr. Chadwyck Healey for other shareholders, supported the petition, Mr. Romer, Q.C., and Mr. Grosvenor Woods appeared for the company and opposing shareholders, and Mr. Everitt for the vendor.—Mr. Justice Chitty was of opinion that the directors were not responsible for the advertisements that had been complained of. On the question whether the company was a bubble or not, he had read the affidavits and reports both of the petitioner's and respondents' witnesses, and on the whole he was of opinion there was a mine to be worked, and also that it was capable of being worked at a profit. It was also contended that the capital subscribed had been insufficient, but in reference to that the company had now a capital of some 10,000l. in addition to their mining property, and whatever the capital was there was no doubt that the majority of the shareholders in the company desired to go on with the company. He had, on the whole, come to the conclusion that the company was not a bubble company within the authority of the previous cases, and that that was no ground for a winding-up order. In his opinion the petitioner's case was not made out, and, therefore, he must dismiss the petition, with costs; but as there had been some delay on the part of the company in producing their books, he should deduct a sum of 10l. for the costs occasioned by such delay from the costs payable to the company.

BELL VEAN (Gwennap).—We are informed that the directors after a careful investigation of the most popular drills have selected the Cranston Drill for the development of this mine. As this drill has not previously been in use in Cornwall its achievements will be watched with some interest. A good drill at work among the tin-stone reported as being met with cannot fail shortly to transfer this venture to the Dividend List.

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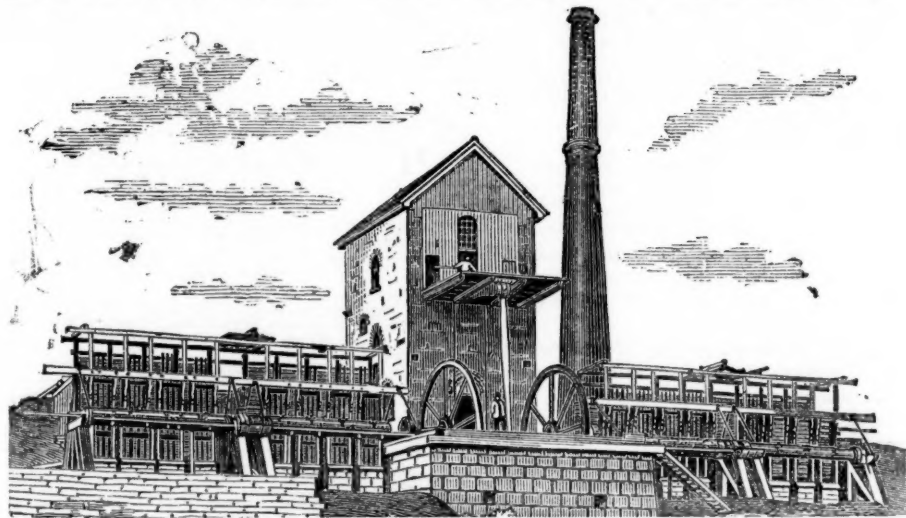
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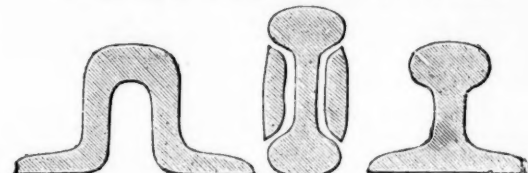
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Supplement, April 1, 1876, containing a report on property of the Maxwell Land
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Shares.	Divid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
3933 Blue Hills, t, c, St. Agnes	4 6	2 1/2	2 1/2	3 4	0 0	0 0
6000 Caron, t, c, Cardigan	2 0	0 0	0 0	0 0	0 0	0 0
6000 Carn Brea, c, t, Illogan	9 7	11 26	26 26 1/2	52 11	0 0	0 0
10240 Devon Gt. Consols, c, t, Tavistock	10 14	0 91	88 95	125 3	0 0	0 0
4296 Dolcoath, c, t, Camborne	0 9	44	43 1/2	26 1	0 0	0 0
5400 East Pool, t, c, Illogan	2 0	0 0	0 0	0 0	0 0	0 0
12000 Frencoch, t, c, Cardigan (11000 sh. iss.)	0 0	0 0	0 0	0 0	0 0	0 0
45000 Glasg. Cons., c, t, (30000 sh. pd.)	2 10	0 3	2 1/2	3 4	0 0	0 0
8500 Gossard and Merlyn Cons., t, Flint.	4 0	0 0	0 0	0 0	0 0	0 0
15000 Great Laxey, t, c, St. Just	0 0	0 0	0 0	0 0	0 0	0 0
6400 Green Hurth, t, c, Durham	0 0	0 0	0 0	0 0	0 0	0 0
20000 Grogwinion, t, c, Cardigan	2 0	0 0	0 0	0 0	0 0	0 0
10240 Gunnislake (Clitters), t, c	2 2	0 0	0 0	0 0	0 0	0 0
2800 Isle of Man, t, c, Isle of Man	25 0	0 0	0 0	0 0	0 0	0 0
20000 Leadhills, t, c, Lanarkshire	18 15	0 0	0 0	0 0	0 0	0 0
3400 Llanurion, t, c, Cardigan	2 0	0 0	0 0	0 0	0 0	0 0
10000 Melanear, t, c, Hayles	2 0	0 0	0 0	0 0	0 0	0 0
9000 Minera Mining Co., t, c, Wrexham	5 0	0 0	0 0	0 0	0 0	0 0
20300 Miring Co. of Ireland, c, t, c, t	7 0	0 0	0 0	0 0	0 0	0 0
8000 Monn, c, t, Anglesea	5 0	0 0	0 0	0 0	0 0	0 0
11829 North Hendre, t, c, Wales	2 10	0 0	0 0	0 0	0 0	0 0
8146 Ditto	1 5	0 0	0 0	0 0	0 0	0 0
2000 North Levant, t, c, St. Just	13 6	0 0	0 0	0 0	0 0	0 0
5000 Penhalls, t, c, St. Agnes	3 17	6 1/2	1 1/2	1 1/2	0 0	0 0
6000 Pennant, t, c, North Wales	5 0	0 0	0 0	0 0	0 0	0 0
12000 Phoenix United, t, c, Link	1 0	0 0	0 0	0 0	0 0	0 0
18000 Tr. Patrick, t, c, (10000 sh. pd.)	1 0	0 0	0 0	0 0	0 0	0 0
10000 Red Rock, t, c, Cardigan	2 0	0 0	0 0	0 0	0 0	0 0
12000 Roman Gravel, t, c, Salop	7 10	0 0	0 0	0 0	0 0	0 0
4000 Rhydalun, t, c, Wales	10 0	0 0	0 0	0 0	0 0	0 0
512 South Caron, t, c, St. Cleer	1 5	0 0	0 0	0 0	0 0	0 0
6123 South Condurrow, t, c, Camborne	6 5	6 1/2	11 1/2	12	0 0	0 0
9000 South Darren, t, c, Cardigan	1 16	0 0	0 0	0 0	0 0	0 0
4500 South Wheel Franchies, t, c, Illogan	7 12	4 1/2	16 1/2	46 15	0 0	0 0
15000 Tincroft, t, c, Pool, Illogan	11 10	0 0	0 0	0 0	0 0	0 0
3000 West Clavert, t, c, Penryn	21 7	6 1/2	9 1/2	55 10	0 0	0 0
12000 West Holway, t, c, Flintshire	1 0	0 0	0 0	0 0	0 0	0 0
512 West Tolgus, c, Redruth	95 10	0 0	0 0	0 0	0 0	0 0
12000 West Wheel Seton, c, Camborne	28 0	0 0	0 0	0 0	0 0	0 0
12000 West Wasset, c, Illogan	7 0	4 1/2	14 1/2	27 10	0 0	0 0
12000 Wheel Crebor, c, Tavistock	2 4	0 0	0 0	0 0	0 0	0 0
1024 Wheel Eliza Consols, t, c, Austell	18 0	0 0	0 0	0 0	0 0	0 0
4000 Wheel Grenville, t, c, Camborne	15 0	0 0	0 0	0 0	0 0	0 0
4295 Wheel Kiddy, t, c, St. Agnes	5 4	6 1/2	1 1/2	12 18	0 0	0 0
3000 Wheel Pevor, t, c, Redruth	7 11	0 0	0 0	0 0	0 0	0 0

FOREIGN DIVIDEND MINES.

Shares.	Divid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
35500 Alamillos, t, Spain	2 0	0 0	0 0	0 0	0 0	0 0
130000 Almada and Tinto Consol., t, Spain	1 0	0 0	0 0	0 0	0 0	0 0
20000 Australian, c, South Australia	7 7	6 1/2	1 1/2	1 1/2	0 0	0 0
15000 Birdseye Creek, c, California	4 0	0 0	0 0	0 0	0 0	0 0
20000 Cape Copper Mining, t, c, South Africa	7 0	0 0	0 0	0 0	0 0	0 0
35000 Cesena Sulph. Co., Romagna, Italy	10 0	0 0	0 0	0 0	0 0	0 0
50000 Copiapo, c, Chile (24 shares)	3 8	0 0	0 0	0 0	0 0	0 0
70000 English and Australian, t, c, Aust.	2 10	0 0	0 0	0 0	0 0	0 0
25000 Fortuna, t, Spain	2 0	0 0	0 0	0 0	0 0	0 0
75000 Frontin, t, c, New Gran.	2 0	0 0	0 0	0 0	0 0	0 0
20000 La Plata, t, c, Leadville	2 0	0 0	0 0	0 0	0 0	0 0
15000 Llaneros, t, Spain	3 0	0 0	0 0	0 0	0 0	0 0
60000 New Quebrada, c, Venezuela	5 0	0 0	0 0	0 0	0 0	0 0
1000 Ditto, Debutures	100 0	0 0	0 0	0 0	0 0	0 0
3000 Oregon, c, Oregon, U.S. (pref. sh.)	4 0	0 0	0 0	0 0	0 0	0 0
50000 Panulillo, c, Chile	4 0	0 0	0 0	0 0	0 0	0 0
25000 Pitangui, t, c, Brazil (in 6000 £1 pd.)	0 10	0 0	0 0	0 0	0 0	0 0
10000 Pontgibaud, t, France	20 0	0 0	0 0	0 0	0 0	0 0
100000 Port Phillip, t, c, Clunes (24 shares)	1 0	0 0	0 0	0 0	0 0	0 0
54000 Richmond Consol., t, Nevada	10 0	0 0	0 0	0 0	0 0	0 0
155880 Rio Tinto, t, c, Sp. Comp. Bds., Huacana	100 0	0 0	0 0	0 0	0 0	0 0
225000 Rio Tinto, shares	10 0	0 0	0 0	0 0	0 0	0 0
40000 Santa Barbara, t, Brazil	0 10	0 0	0 0	0 0	0 0	0 0
120000 Scottish-Australian Mining Co., t, c	1 0	0 0	0 0	0 0	0 0	0 0
80000 Ditto, New	0 10	0 0	0 0	0 0	0 0	0 0
50000 Sentein, t, c, t, Arlege, France	1 0	0 0	0 0	0 0	0 0	0 0
22500 Sierra Buttes, c, California	2 0	0 0	0 0	0 0	0 0	0 0
40625 Ditto, Plumas Eureka	2 0	0 0	0 0	0 0	0 0	0 0
200000 St. John, t, c, Madras (fully pd.)	1 0	0 0	0 0	0 0	0 0	0 0
155000 St. John, t, c, Madras (fully pd.)	1 0	0 0	0 0	0 0	0 0	0 0
92565 Tharsis, t, c, t, Spain (31000 sh. pd.)	10 0	0 0	0 0	0 0	0 0	0 0
20000 Tolima, t, c, Colombia	5 0	0 0	0 0	0 0	0 0	0 0
25000 Victoria, t, c, Australia	1 0	0 0	0 0	0 0	0 0	0 0
100000 Victorine (Nevada, U.S.) Deb. Bds.	1 0	0 0	0 0	0 0	0 0	0 0
15000 Western Andes, t, Colombia	5 0	0 0	0 0	0 0	0 0	0 0
2100 W. Prussian (5500 pref. sh. £10 pd.)	10 0	0 0	0 0	0 0	0 0	0 0

Have made calls since last dividend was paid.

NON-DIVIDEND BRITISH MINES.

Shares.	Divid.	Last wk.	Clos. pr.
30000 Alston United, t, c, Cumberland	1 0	0 0	0 0
12000 Assheton, t, c, Carnarvonshire	5 0	0 0	0 0
36000 Basset & Buller Cons., t, c, Illogan	1 0	0 0	0 0
11583 Bedford United, t, c, Tavis (21 lib.)	0 10	0 0	0 0
30000 Blackburnbanks & Gildersdale, t, c	0 5	0 0	0 0
30000 Bodidris, t, c, t, Wrexham	1 0	0 0	0 0
30000 British, t, c, t, Wrexham	1 0	0 0	0 0
20000 Bwile United, t, c, Cardigan	0 17	6 1/2	3 1/2
4296 Callington Consols, t, c	2 0	0 0	0 0
25000 Cambrian, t, c, t, Cardigan	2 0	0 0	0 0
50000 Carn Camborne, t, c, Camborne	1 0	0 0	0 0
30000 Carnarvon, t, c, Carnarvonshire	1 0	0 0	0 0
37500 Carnarvonshire Cons., t, c, Llanrwst	2 0	0 0	0 0
50000 Carpellia Consols, t, c, Stephens	1 0	0 0	0 0
20000 Cathedral Cons., t, c, Gwennap	0 13	0 0	0 0
6000 Central Fossdale, t, c, Isle of Man	1 17	6 1/2	2 1/2
25000 Coed-y-Fedw & Pant-y-Buarth, t, c	1 0	0 0	0 0
2450 Cook's Kitchen, t, c, Illogan	30 14	9 1/2	25 30
20000 Court Grange United, t, c	1 0	0 0	0 0
15500 Crook Burn, t, c, t, Wrexham	0 15	0 0	0 0
14000 Crosswood Mining Lands, t, c	1 0	0 0	0 0
45000 D'Eresby Mountain, t, c, Llanrwst	0 10	0 0	0 0
20000 Denbighshire Consolidated, t, c	3 0	0 0	0 0
10000 Derwent, t, c, Durham	4 0	0 0	0 0
50000 Devon, t, c, Tavistock	1 0	0 0	0 0
60000 Devon Friendship, t, c, t, Tavistock	1 0	0 0	0 0
10000 Devon Great United (24 shares)	1 5	0 0	0 0
50000 Drakevalls, t, c, Calstock	1 0	0 0	0 0
100000 Dubby Syke, t, c, Durham	1 0	0 0	0 0
20000 East Blue Hills, t, c, St. Agnes	0 5	0 0	0 0
6000 East Bodall, t, c, St. Cleer	0 8	0 0	0 0
6144 East Bodall, t, c, St. Cleer	4 3	6 1/2	1 1/2
4000 East Chiverton, t, c, Penryn	10 7	3 1/2	2 1/2
30000 E. Craven Moor, t, c, Pateley Bridge	1 0	0 0	0 0
15000 East Devon Cons., t, c, Buckfastleigh	2 0	0 0	0 0
30000 East Herodsfoot, t, c, Liskeard	1 0	0 0	0 0
20000 East Long Lake, t, c, Wales	1 0	0 0	0 0
21000 East Roman Gravel, t, c, Salop	0 15	0 0	0 0
18000 East Van, t, c, Llanidloes	5 0	0 0	0 0
20000 East Wheel Llanidloes, t, c, Llanidloes	15 13	6 1/2	4 1/2
100000 East Wheel Llanidloes, t, c, Llanidloes	15 13	6 1/2	4 1/2
12000 Gawton, t, c, Tavistock (24 shares)	1 16	0 0	0 0
14000 Glenroy, t, c, t, Isle of Man	4 0	0 0	0 0
30000 Gobbett, t, c, Dartmoor	1 0	0 0	0 0
10000 Goddards, t, c, t, Carnarvon	1 0	0 0	0 0
32000 Goginan, t, c, Cardigan	1 0	0 0	0 0
25000 Goodveere, t, c, St. Cleer	1 0	0 0	0 0
20000 Great Dyliff, t, c, t, (10000 sh. issued)	1 0	0 0	0 0
100000 Great Holway, t, c, Flintshire	5 0	0 0	0 0
100000 Great Polgoch United, t, c	1 0	0 0	0 0
100000 Great Western, t, c, t, Flintshire	1 0	0 0	0 0
10000 Gwyn-y-Mynydd, t, c, Flint (pref. sh.)	0 10	0 0	0 0
10000 Gwydyr Amal, t, c, t, Carnarvon	1 0	0 0	0 0
12000 Herodsfoot, t, c, near Liskeard	0 13	9 1/2	5 1/2
18000 Hingston Down, t, c, Calstock	0 12	0 0	0 0
20000 Kirkmichael, t, c, t, (20000 unissued)	1 0	0 0	0 0
6000 Killifreth, t, c, Chacewater	4 1	6 1/2	1 1/2
20000 Kit Hill Gt. Cons., t, c, t, (24 sh.)	0 15	0 0	0 0
15000 Lady Ann, t, c, Llanarmon	1 0	0 0	0 0
30000 Lady Ashburton, t, c, Callington	1 0	0 0	0 0
15000 Lady Bertha, t, c, t, Calstock	1 0	0 0	0 0
25000 Langford, t, c, Callington	0 10	0 0	0 0
25000 Levant, t, c, St. Just	11 10	0 0	0 0
15000 Llandegla, t, c, Wales	1 0	0 0	0 0
10000 Llanidloes, t, c, t, Helston	1 0	0 0	0 0
5120 Lovell, t, c, Wendron	0 18	0 0	0 0
9000 Marke Valley, t, c, Linkinhorne	6 8	6 1/2	1 1/2
6000 Medlyn Moor, t, c, Wendron	3 15	10 0	0 0
28000 Mid-Devon, t, c, t, (17000, 38, 4d. pd.)	0 8	0 0	0 0
20000 Mona Consols, t, c, Anglesea	1 0	0 0	0 0
150000 Monks Consols, t, c, t, Devon	2 0	0 0	0 0
20000 Mostyn Consols, t, c, t, Flint	1 0	0 0	0 0
10000 Mynydd Gwddol, t, c, Cardigan	1 0	0 0	0 0
12000 Morfa Du, t, c, t, Anglesea	1 0	0 0	0 0
80000 Mounts Bay, t, c, t, Breage	0 15	0 0	0 0
6144 Mount Carbis, t, c, Redruth	1 0	0 0	0 0
2400 New Cook's Kitchen, t, c, Illogan	8 1	0 0	0 0
8000 New Dolcoath, t, c, Camborne	3 0	0 0	0 0
10000 New Holmbush, t, c, Callington	2 0	0 0	0 0
6000 New Kiddy, t, c, St. Agnes	0 10	0 0	0 0
12000 New Penrose, t, c, t, Helston	1 0	0 0	0 0
3500 New Penrose, t, c, t, Helston	6 0	0 0	0 0
20000 New Trumpet, t, c, Wendron	1 0	0 0	0 0
12000 New West Caradon, t, c, Liskeard	0 2	5 1/2	3 1/2
3000 New Wheel Pevor, t, c, Redruth	0 10	0 0	0 0
35000 New Wye Valley, t, c, Montgomery	1 0	0 0	0 0
20000 North Alfred, c, Phillack	0 10	0 0	0 0
5328 North Busy, t, c, Blackwater	0 15	0 0	0 0
10000 N. D'Eresby Mount, t, c, t, Carnarvon	1 0	0 0	0 0

NON-DIVIDEND MINES—continued.

Shares.	Divid.	Last wk.	Clos. pr.
25000 North Goginan, * t, Cardiganshire	1 0 0	14 1/2	1 1/2
6400 North Green Hurth, * t, (31,014 pd.)	0 2 6	1 1/2	3/4
12000 North Herodsfoot, t, Liskeard	0 8 6	5 1/2	3/4
50000 North Molton, * t, c, m, t, Devon	1 0 0	—	—
6000 No-th Penstruthal, t, c, Gwennap	1 19 6	3 1/2	3/4
2936 North Penstruthal, t, c, St. Agnes	8 17 10	—	—
8000 Northern, * t, c, Durham	1 0 0	—	3/4
40000 Okef-Tor, * t, c, a, Calstock	1 0 0	15 1/2	1 1/2
80000 Old Shepherds s-t, Cornwall	0 15 0	—	—
12000 Pandora, * t, Carnarvon	2 0 0	3 1/2	3/4
11612 Pant-y-Mwyn, * t, Mold	2 0 0	25 1/2	2 1/2
45000 Parys Corporation, * t, Anglesea	1 0 0	1 1/2	—
7500 Pateley Bridge, t, Yorkshire	1 0 0	—	—
6000 Pedn-an-drea, t, Redruth	2 7 0	3 1/2	3/4
12000 Pelyn Wood, t, Llanvorydd	0 5 6	5 1/2	3/4
600 Penlarys United, t, c, Camborne	8 0 0	—	—
30000 Penhale and Barton, * t, St. Columb	1 0 0	—	—
12000 Pen-y-Oscedd, * t, Flintshire	1 0 0	1 1/2	1 1/2
15000 Perran Consols, s-t,	1 0 0	1 1/2	3/4
10000 Pioneer, * var, Wales	1 0 0	1 1/2	1 1/2
10000 Pilrose, t, Cornwall	0 13 6	3 1/2	3/4
10000 Port Nigel, s-t, Carnarvonshire	2 0 0	2 1/2	1 1/2
6000 Prince Llewellyn, * t, c, St. Agnes	0 13 6	1 1/2	1 1/2
12000 Prince of Wales, s, Calstock	0 13 6	1 1/2	1 1/2
15000 Royalton, * t, St. Columb	0 13 6	1 1/2	1 1/2
35000 Russell United, * t, c, Tavistock	0 15 6	1 1/2	1 1/2
30000 Silver Hill, t, Callington	0 10 0	1 1/2	1 1/2
50000 Sinclair, * t, bl, Whitford	1 0 0	1 1/2	1 1/2
40000 Sotridge, * t, Horrabridge	1 0 0	1 1/2	1 1/2
30000 South Carbis, t, c, Redruth	0 10 0	1 1/2	1 1/2
35000 South Dalcouth, t, c, Bidefastleigh	1 0 0	1 1/2	1 1/2
5000 South Dalcouth, t, c, Illogan	0 12 0	1 1/2	1 1/2
6000 South Penstruthal, t, c, Gwennap	4 14 0	2 1/2	2 1/2
6000 South Tolcarne, t, c, Camborne	1 0 0	1 1/2	1 1/2
40000 South Wheel Crebort, * t, c, Tavistock	19 14 6	10 1/2	10 1/2
2043 South Wheel Crofty, * t, Illogan	1 0 0	1 1/2	1 1/2
40000 Tamar, s-t, Barmastoun	0 15 0	1 1/2	1 1/2
10000 Tavistock Gt. Consols, t, Salop	1 0 0	1 1/2	1 1/2
6400 Teesdale, t, c, Durham (pref.)	1 0 0	1 1/2	1 1/2
12000 Ten Hill, t, St. Stephens	1 0 0	1 1/2	1 1/2
10000 Temple, t, Cardigan	0 5 6	1 1/2	1 1/2
12000 Trevice Consols, t, c, Gwennap	0 8 0	1 1/2	1 1/2
6000 Trugo, c, St. Columb	0 8 0	1 1/2	1 1/2
10000 Tyn-y-Fron, * t, Cardiganshire	1 0 0	1 1/2	1 1/2
35000 Un. Van & Glyn, * t, (t, & 17500 pref. sh)	1 0 0	1 1/2	1 1/2
10000 Vaughan, * t, Cardiganshire	10 0 0	1 1/2	1 1/2
15000 Victor, t, c, Cilcen, Flintshire	0 14 0	1 1/2	1 1/2
18000 Vincent, t, c, Llanrum	1 0 0	1 1/2	1 1/2
12000 Walkum United, * t, c, Tavistock	1 0 0	1 1/2	1 1/2
12000 West Asheton, t, Carnarvon	0 9 0	1 1/2	1 1/2
12000 West Caradon, c, St. Cleer	10 0 0	2 1/2	2 1/2
3000 W. Craven Moor, t, Pateley Bridge	0 5 0	1 1/2	1 1/2
12000 West Crebort, c, Tavistock	1 0 0	1 1/2	1 1/2
10240 West Devon Consols, c, Calstock	0 17 6	2 1/2	2 1/2
10000 West Godolphin, t, c, Breage	0 12 0	1 1/2	1 1/2
6000 West Kiddy, t, c, St. Agnes	1 0 0	1 1/2	1 1/2
30000 West Liskeard, * t, (t, sh) Cardigan	1 0 0	1 1/2	1 1/2
3000 West Mary Ann, Menheniot	1 13 0	1 1/2	1 1/2
2000 W. Pateley Bridge, t, Yorkshire	0 18 0	1 1/2	1 1/2
12000 West Phoenix, t, c, Linkinhorne	0 3 0	1 1/2	1 1/2
6000 West Polbreen, * t, c, St. Agnes	0 3 0	1 1/2	1 1/2
5190 West Poldice, St. Day	6 0 0	1 1/2	1 1/2
10000 West Vor, t, Helston	2 0 0	1 1/2	1 1/2
2048 West Wheel Frances, t, Illogan	30 13 3	19 17	18
3000 West Wheel Foorer, t, Redruth	3 0 6	14 1/2	14 1/2
12000 West Wheel Wiley, t, Montgomery	3 0 0	1 1/2	1 1/2
6000 Wheel Agar, c, Illogan	14 6 0	15 1/2	14 1/2
6144 Wheel Basset, c, Illogan	0 18 0	5 1/2	6 1/2
3000 Wheel Boys, t, Redruth	0 18 0	2 1/2	2 1/2
12000 Wheel Coates United, * t, St. Agnes	0 18 6	2 1/2	2 1/2
6000 Wheel Colt, t, St. Agnes	nli	1 1/2	1 1/2
2585 W. Comf., & No. Tres., t, c, Gwennap	2 2 0	2 1/2	2 1/2
50000 Wheel Elizabeth, t, c, Cornwall	1 0 0	—	—
5000 W. Portman, * s, c, a, s, Harrowbarrow	1 0 0	3 1/2	2 1/2
15000 Wheel Goodwin, t, c, Carnarvon	1 10 0	1 1/2	1 1/2
12288 Wheel Jane, t, Kea	0 18 0	1 1/2	1 1/2
12000 Wheel Jewell, c, St. Hilary	0 18 0	1 1/2	1 1/2
25000 Wh. Honey and Trelawny, s-t, Lisk.	2 0 0	2 1/2	2 1/2
12000 Wheel Lusky, t, Callington	0 1 3	1 1/2	1 1/2
2000 Wheel Owles, t, St. Just	7 3 0	—	—
6000 Wh. Prussia, & Cardew, t, c, Rith	2 0 0	1 1/2	1 1/2
6000 Wheel Sisters, t, Lelant	3 12 0	2 1/2	2 1/2
4096 Wheel Uny, t, c, Redruth	16 3 0	4 1/2	4 1/2
4000 Ysawth, * t, Cardigan	1 0 0	1 1/2	1 1/2